UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION II
JACOB K. JAVITS FEDERAL BUILDING
NEW YORK, NEW YORK 10278

HAZARDOUS AND SOLID WASTE AMENDMENTS OF 1984
(MODIFIED PERMIT)

Permittee:
Occidental Chemical Corporation
Buffalo Ave. & 47th St.
P.O. Box 344
Niagara Falls, NY 14302

I.D. Number: NYD000824482
Effective Date: June 30, 1988 -Original Permit
August 1, 1989-Modification
October 1, 1990-Modification
Expiration Date: June 30, 1993

This permit is issued by the United States Environmental Protection Agency ("EPA" or "Agency") under the authority of the Resource Conservation and Recovery Act ("RCRA") of 1976, Subtitle C, 42 U.S.C. Sections 6921-6931, the Hazardous and Solid Waste Amendments ("HSWA") of 1984, and EPA regulations promulgated pursuant thereto, to Occidental Chemical Corporation (hereafter called the Permittee), to operate a hazardous waste management facility located at Buffalo Avenue & 47th Street, Niagara Falls, New York.

The existing hazardous waste management activities at the facility consist of storage of hazardous waste in tanks and containers, managing dioxin wastes in two enclosed waste piles, and the incineration of process hazardous waste in a liquid injection incinerator. The modifications have been incorporated in this permit. The modified pages have been marked on its bottom left.

In accordance with HSWA, the existing permit issued to the Permittee on June 30, 1988 and modified on July 25, 1989 requires the Permittee to:

1. Comply with conditions regarding reporting, modification, operating duties, record keeping, duty to provide information, and other standard conditions in accordance with Module I of the HSWA permit;

2. Determine the nature, rate, and extent of migration of hazardous waste or hazardous constituents in soils, groundwater, surface water, subsurface gas and/or air from any solid waste management unit or groups of units at the facility regardless of the time waste was placed in such unit, and to develop appropriate corrective action for such releases in accordance with Module III;

3. (a) Submit, within 150 days of permit issuance, a Waste Reduction Impact Statement that includes a program and schedule for implementing hazardous waste reduction techniques; and (b) certify annually that on-site generation of hazardous waste is minimized to the extent practical in accordance with Module IV;

4. Comply with federal regulations which prohibit the land disposal of untreated hazardous wastes in accordance with Module V;

5. Comply with federal regulations, for the storage of dioxin wastes in containers, including the requirements for providing spill containment, maintaining containers in good condition, and regularly carrying out inspections in accordance with Module VI;

6. Comply with federal regulations for the storage of dioxin wastes in tank systems including regularly carrying out inspections, responding to spills according to a contingency plan, and maintaining tank integrity in accordance with Module VII; and

7. Comply with federal regulations for the management of dioxin wastes in enclosed waste piles and the requirements of Module VIII including certain operating requirements, responding to spills according to a contingency plan, and carrying out regular inspections.

This permit modification maintains the requirements summarized above, authorizes the incineration of dioxin bearing remedial wastes, and authorizes the storage and treatment of dioxin wastes in a new tank storage system to be constructed.

The RCRA permit for this facility consists of the following: the EPA HSWA permit issued June 30, 1988 as modified on July 25, 1989 and by this permit modification, the New York State 6NYCRR Part 373 permit issued June 30, 1988, and its associated permit modifications.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (Module I, pages I-1 through I-9; Module II, page II-1; Module III, pages III-1 through III-17; Module IV, page IV-1; Module V, pages V-1 through V-3; Module VI, pages VI-1 through VI-2; Module VII, pages VII-1 through VII-4; Module VIII, pages VIII-1 through VIII-2; Module IX, pages IX-1 through IX-14; Attachment XI, pages A-1 through A-3; and the applicable regulations contained in 40 C.F.R. Parts 124, 260 through 264, 268, and 270 as specified in the permit. Applicable regulations are those which are in effect on the date of issuance of this permit, except as provided in 40 C.F.R. Section 124.86(c) for RCRA permits being processed under Subpart E or F of Part 124 (see 40 C.F.R. Section 270.32(c)). A permit may be modified, however, to incorporate new regulations pursuant to 40 C.F.R. Section 270.41(a)(3).

This permit is based on the assumption that the information provided in the Permittee's Part B application, submitted on March 17, 1983, and the Permittee's permit modification applications, dated June 17, 1988 and September 14, 1988, and all succeeding revisions and data submissions to those applications, are accurate. Further, this permit is based, in part, on the provisions of Sections 206, 212, and 224 of HSWA, which modify Sections 3002, 3004, and 3005 of RCRA. The Permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the Permittee's misrepresentation of any relevant facts at any time may be grounds for the termination, revocation and reissuance, or modification of this permit (see 40 C.F.R. Sections 270.41, 270.42, and

270.43) and potential enforcement action. The Permittee must inform EPA of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit as modified is effective as of October 1, 1990 and shall remain in effect until June 30, 1993 unless revoked and reissued, modified or terminated in accordance with 40 C.F.R. Sections 270.41, 270.42 or 270.43, or continued in accordance with 40 C.F.R. Section 270.51(a).

Constantine Sidamon-Eristoff
Regional Administrator
United States Environmental Protection Agency
Region II

8/20/90
Date

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MODULE I- STANDARD CONDITIONS

A. EFFECT OF PERMIT. This permit authorizes only the management of hazardous waste expressly described in this permit and does not authorize any other activities. Compliance with the terms of this permit constitutes compliance, for purposes of enforcement with Subtitle C ("Hazardous Waste Management") of RCRA. Issuance of this permit does not convey any property rights of any sort, or any exclusive privilege; nor does it authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local laws or regulations. Compliance with the terms of this permit does not constitute a defense to any action brought under Sections 3013 and/or 7003 of RCRA (42 U.S.C. Sections 6934 and/or 6973), Sections 106(a), 104, 107 and/or 122 of the Comprehensive Environmental Response, Compensation, and Liability Act ("CERCLA") of 1980 (42 U.S.C. Section 9601 et seq.), as amended, or any other law and corresponding regulations governing protection of public health or the environment. (40 C.F.R. Sections 270.4, 270.30(g))

B. PERMIT ACTIONS. This permit may be modified, revoked and reissued, or terminated for cause as specified in 40 C.F.R. Section 270.41, 270.42 and 270.43. The filing of a request for a permit modification, revocation and reissuance, or termination or the notification of planned changes or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. Review of any application for a permit renewal shall consider improvements in the state of control and measurement technology, as well as changes in applicable regulations.

C. PERMIT CONDITIONS. Pursuant to Section 3005(c)(3) of RCRA, 42 U.S.C. Section 6825(c)(3), (Section 212 of HSWA), promulgated as regulation 40 C.F.R. Section 270.32(b), this permit contains those terms and conditions the Administrator determines necessary to protect human health and the environment.

D. SEVERABILITY. The provisions of this permit are severable, and if any provision of this permit or the application of any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby. (40 C.F.R. Section 124.16(a))

E. DUTIES AND REQUIREMENTS.

1. Duty to Comply. The Permittee shall comply with all conditions of this permit, except that the Permittee need not comply with the conditions of this permit to the extent and for the duration such noncompliance is authorized in an emergency permit (see 40 C.F.R. Section 270.61). Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of RCRA and is grounds for enforcement action; for permit termination, revocation and reissuance, modification; or for denial of a permit renewal application. (40 C.F.R. Section 270.30(a))

2. Duty to Reapply. If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee shall submit a complete application for a new permit at least 180 days before this permit expires, unless the Regional Administrator grants permission for a later date which is not later than the expiration date of the existing permit. (40 C.F.R. Sections 270.10(h) and 270.30(b))

3. Permit Expiration and Continuation. This permit will be in effect for the time period stated on page i, which must not exceed ten years. Each permit for a land disposal facility shall be reviewed by the Administrator five years after the date of permit issuance or reissuance and shall be modified as necessary, as provided in 40 C.F.R. Section 270.51. As long as EPA is the permit issuing authority for HSWA, this permit and all conditions herein will remain in effect beyond the permit's expiration date if the Permittee has submitted a timely, complete application (40 C.F.R. Sections 270.13 through 270.21 and 270.10) and through no fault of the Permittee, the Regional Administrator has not issued a new permit as set forth in 40 C.F.R. Section 124.51.

   If the State, at the time of permit renewal, has RCRA permitting authority under 40 C.F.R. Part 271 for HSWA, and if the Permittee has submitted a timely and complete application under State law and regulations, the terms and conditions of this permit continue in force beyond the expiration date of the permit, but only until the effective date of the State's issuance or denial of a State RCRA permit which includes measures pursuant to HSWA.

4. Need to Halt or Reduce Activity Not a Defense. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (40 C.F.R. Section 270.30(c))

5. Duty to Mitigate. In the event of noncompliance with this permit, the Permittee shall take all reasonable steps to minimize releases to the environment, and shall carry out such measures as are reasonable to prevent significant adverse impacts on human health or the environment. (40 C.F.R. Section 270.30(d))

6. Proper Operation and Maintenance. The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit. (40 C.F.R. Section 270.30(e))

7. Duty to Provide Information. The Permittee shall furnish to the Regional Administrator, within a reasonable time, any relevant information which the Regional Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Regional Administrator, upon request, copies of records required to be kept by this permit. (40 C.F. R. Sections 270.30(h) and 264.74(a))

8. Inspection and Entry. The Permittee shall allow the Regional Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

   a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

   b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

   c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

   d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by RCRA, any substances or parameters at any location. (40 C.F.R. Sections 270.30(i) and 264.74(a))

9. Monitoring and Records.

   a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity (40 C.F.R. Section 270.30(j)). The method used to obtain a representative sample of the waste to be analyzed must be the appropriate method from Appendix I of 40 C.F.R. Part 261 or an equivalent method approved by the Regional Administrator (40 C.F.R. Section 261.20(c)). Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (EPA Publication SW-846, as currently amended)(40 C.F.R. Section 270.6), Standard Methods for the Examination of Water and Waste Water (15th Edition, 1980), or an equivalent method approved by the Regional Administrator.

   b. The Permittee shall retain for a period of at least 3 years all records and data used to complete the application for this permit. The Permittee shall also retain records of all monitoring information, including all calibration and

maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports and records required by this permit, and the certification required by 40 C.F.R. Section 264.73(b)(9), for a period of at least 3 years from the date of the sample, measurement, report, certification, or record. These periods may be extended by request of the Regional Administrator at any time and are automatically extended during the course of any unresolved enforcement action regarding this facility. The Permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations, for the active life of the facility. (40 C.F.R. Section 270.30(j))

c. Records for monitoring information shall include:

(i) The date, exact place, and time of sampling or measurements;

(ii) The individual(s) who performed the sampling or measurements;

(iii) The date(s) analyses were performed;

(iv) The individual(s) who performed the analyses;

(v) The sampling techniques or methods used;

(vi) The analytical techniques or methods used; and

(vii) The results of such analyses.

d. The Permittee shall conduct a quality assurance program to ensure that the monitoring data are technically accurate and statistically valid. The quality assurance program shall be in accordance with Test Methods for Evaluating Solid Waste: Physical/Chemical Methods (EPA Publication SW-846, as currently amended). (40 C.F.R. Sections 270.30(e) and 270.6)

e. Monitoring Reports: Monitoring results must be reported at the intervals specified elsewhere in this permit. (40 C.F.R. Section 270.30(l)(4))

10. Reporting Planned Changes. The Permittee shall give notice to the Regional Administrator as soon as possible of any planned physical alterations or additions to the permitted facility. (40 C.F.R. Section 270.30 (l)(1))

11. Anticipated Noncompliance. The Permittee shall give advance notice to the Regional Administrator of any planned changes in the permitted facility or activity which may result in

noncompliance with permit requirements. This notice must include a description of all incidents of noncompliance reasonably expected to result from the proposed changes. (40.C.F.R. Section 270.30(l)(2))

12. Transfer of Permit. This permit is not transferrable to any person unless notice has been given to the Regional Administrator and the permit has been modified, or revoked and reissued, or a minor modification made to identify the new permittee and to incorporate such other requirements as may be necessary under RCRA. (40 C.F.R. Sections 270.30(l)(3) and 270.40)

13. Compliance Schedules. Reports of compliance or noncompliance with interim and/or final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date. (40 C.F.R. Section 270.33)

14. Immediate Reporting of Releases.

a. Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his designee when the emergency coordinator is on call) must immediately:

(i) Activate internal facility alarms or communication systems, where applicable, to notify all facility personnel; and

(ii) Notify appropriate State or local agencies with designated response roles if their help is needed.

b. If the emergency coordinator determines that the facility has had a release, fire, or explosion which could threaten human health, or the environment, outside the facility, he must report his findings as follows:

(i) If his assessment indicates that evacuation of local areas may be advisable, he must immediately notify appropriate local authorities. He must be available to help appropriate officials decide whether local areas should be evacuated; and

(ii) He must immediately notify either the government official designated as the on-scene coordinator for that geographical area, (in the applicable regional contingency plan under Part 1510 of this title) or the National Response Center (using their 24-hour toll free number 800/424-8802). The report must include:

(a) Name and telephone number of reporter;

(b) Name and address of facility;

(c) -Time and type of incident (e.g., release, fire);

(d) Name and quantity of materials(s) involved, to the extent known;

(e) The extent of injuries, if any; and

(f) The possible hazards to human health, or the environment, outside the facility (40 C.F.R. Section 264.56).

15. Twenty-four Hour Reporting. The Permittee shall orally report to the Regional Administrator any noncompliance with the permit which may endanger health or the environment within 24 hours from the time the Permittee becomes aware of the circumstances, including:

a. Information concerning release of any hazardous waste that may cause an endangerment to public drinking water supply sources;

b. Any information of a release or discharge of hazardous waste, or a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

(i) Name, address, and telephone number of the owner or operator;

(ii) Name, address, and telephone number of the facility;

(iii) Date, time, and type of incident;

(iv) Name and quantity of material(s) involved;

(v) The extent of injuries, if any;

(vi) An assessment of actual or potential hazards to the environment and human health outside the facility, where this is applicable; and

(vii) Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided to the Regional Administrator within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and

if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. The Permittee need not comply with the 5-day written notice requirement if the Regional Administrator waives that requirement in favor of a written report within 15 days of the time the Permittee becomes aware of the circumstances. (40 C.F.R. Section 270.30(l)(6))

16. Additional Noncompliance Reporting. The Permittee shall report all instances of noncompliance not required to be reported under Module I, Conditions E.9, E.13 or E.15. The reports shall contain the information listed in Module I, Condition E.15(b)(i-vii), and all other relevant information. (40 C.F.R. Section 270.30(l)(10))

17. Other Information. Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application, or in any report to the Regional Administrator, the Permittee shall promptly submit such new or correct facts or information to the Regional Administrator. (40 C.F.R. Section 270.30(l)(11))

F. DOCUMENTS TO BE MAINTAINED AT THE FACILITY. The Permittee shall maintain at the facility all documents required by this permit, and amendments, revisions and modifications to these documents.

G. REPORTS, NOTIFICATIONS AND SUBMISSIONS TO THE REGIONAL ADMINISTRATOR. All reports, notifications or other submittals required by this permit are to be submitted to the Regional Administrator and sent certified mail or given to:

United States Environmental Protection Agency
Hazardous Waste Facilities Branch
Air and Waste Management Division
Region II
26 Federal Plaza
New York, New York 10278

Copies shall also be sent to the following addresses:

United States Environmental Protection Agency
Permits Administration Branch
Office of Policy and Management
Region II
26 Federal Plaza
New York, New York 10278

New York State Department of Environmental Conservation
Director, Bureau of Hazardous Waste Facility Permitting
50 Wolf Road
Albany, New York 12233-4016

New York State Department of Environmental Conservation
Region 9 Headquarters
Regional Hazardous Waste Engineer
600 Delaware Avenue
Buffalo, New York 14202-1073

H. SIGNATORY REQUIREMENTS. All reports, or information submitted to the Regional Administrator shall be signed and certified in accordance with 40 C.F.R. Sections 270.11, and 270.30(k).

I. CONFIDENTIAL INFORMATION. The Permittee may claim confidential any information required to be submitted by this permit in accordance with 40 C.F.R. Section 270.12 and 40 C.F.R. Part 2, Subpart B.

J. PERMIT MODIFICATIONS. The permit may be modified as allowed under 40 C.F.R. Sections 270.41 and 270.42. Modifications to this permit may be made by the Regional Administrator for cause in accordance with 40 C.F.R. Section 270.41. Modifications to the permit may also be requested by the Permittee as is provided for in 40 C.F.R. Section 270.42.

K. DEFINITIONS. For the purpose of this permit, terms used herein shall have the same meaning as those set forth in 40 C.F.R. Parts 260 through 270, unless this permit specifically states otherwise; where terms are not otherwise defined, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. "Regional Administrator" is the Regional Administrator of the United States Environmental Protection Agency for Region II, his designee or authorized representative.

Hazardous constituents means those constituents listed in Appendix VIII to 40 C.F.R. Part 261.

A solid waste management unit ("SWMU") includes any discernible waste management unit from which hazardous waste or hazardous constituents have migrated or may migrate, irrespective of whether the unit was intended for the management of hazardous or solid wastes as those terms are defined in 40 C.F.R. Sections 261.2 and 261.3. These units include, but are not limited to: landfills, surface impoundments, waste piles, land treatment units, tanks, elementary neutralization units, transfer stations, container storage areas, incinerators, injection wells,

recycling units, and closed and abandoned units. Certain areas associated with production processes which have become contaminated as a result of routine, and systematic releases of wastes, or hazardous constituents from wastes, are also considered SWMUs.

Release for purposes of this permit includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injection, escaping, leaching, dumping, or disposing into the environment of any hazardous waste or hazardous constituent.

L. PERMIT SUBMITTALS. All plans, reports, and schedules required by the terms of this Permit are, upon approval by the Agency, incorporated by reference into this Permit. Upon incorporation, the provisions of each such document shall be binding upon the Permittee and have the same legal force and effect as the requirements of this Permit.

The Permittee shall submit draft plans and reports required by this Permit to the Agency for review and comment. If this Agency determines that any plan or report required by this Permit is deficient (in whole or in part), the Permittee shall either promptly respond to the comments or make revisions to the submission consistent with the Agency's comments. Within a reasonable time frame specified by the Agency, a final plan or report shall be submitted to the Agency for approval. Extensions of the due date for submittals may be granted by the Agency based on the Permittee's documentation that sufficient justification for the extensions exist.

MODULE II - FACILITY DESCRIPTION

The Occidental Chemical Corporation (OCC) Niagara Falls facility is located in Niagara Falls, New York on the east bank of the Niagara River between Lake Erie and Lake Ontario. The plant is one of the largest chemical production facilities in New York State. The plant occupies approximately 160 acres, employs about 800 persons, and operates, for the most part, on a 24 hour/day, 7 days/week basis. The Niagara plant produces both organic and inorganic chemicals. Hazardous wastes are generated as a result of some production activities.

Hazardous wastes are stored/treated in containers in 17 areas across the plant. The maximum storage volume allowed in containers is equivalent to 9848 55-gallon drums, plus 68 30-cubic yard roll-off boxes (for soils and large debris), plus 3-4000 gallon trailers. Hazardous wastes consisting of contaminated soils and sediments are managed in two waste piles each with a capacity of approximately 20,000 cubic yards. Hazardous wastes are stored/treated in 10 tanks across the plant, 7 of which are associated with the hazardous waste incinerator. The maximum storage volume allowed for all tanks is 78,500 gallons. Remedial hazardous wastes are treated in a liquid injection incinerator which includes two independent chambers. Only unit number two may be used to incinerate remedial waste.

Over the life of this facility, production and waste management activities have resulted in the release of hazardous waste or hazardous constituents to the environment. Certain studies and corrective measures have been carried out at the facility. Module III of this permit requires the Permittee to conduct additional studies and develop a Corrective Measures Implementation (CMI) program to address and remediate these releases in a manner that is protective of human health and the environment.

MODULE III - CORRECTIVE ACTION REQUIREMENTS

A. Applicability

Section 3004(u) of RCRA, 42 U.S.C. 6924(o) (Section 206 of HSWA), and its corresponding regulations published in 40 CFR Section 264.101 requires corrective action for all releases of hazardous waste or constituents from any solid waste management unit (SWMU) at a storage, treatment or disposal facility seeking a Hazardous and Solid Waste Amendments of 1984 permit, regardless of the time the waste was placed in such unit. Section 3004(v) of RCRA (Section 207 of the Hazardous and Solid Waste Amendments of 1984) requires that corrective action be taken beyond the facility boundary where necessary to protect human health and the environment.

Information for previously identified SWMU's at the Buffalo Avenue Plant (also known as the Occidental Chemical Corporation Niagara Plant) owned by Occidental Chemical Corporation (Occidental) was obtained through a review of the following:

- Information developed and/or compiled pursuant to the Stipulation and Judgment Approving Settlement Agreement entered in federal court by the United States, the State of New York, the City of Niagara Falls and Occidental for the S-Area landfill, as well as information developed pursuant to the litigation between New York State and Occidental concerning the Occidental Niagara Plant property.

- Resource Conservation and Recovery Act Permit Application, Part A initial submission dated November 19, 1980, as revised; Part B initial submission dated March 17, 1983, as revised.

- New York State 6 NYCRR Part 373 Site Wide Facility Permit Application, dated August 7, 1986, as revised.

- Facility Operating Records

- The Solid Waste Management Unit Report prepared by Occidental for the USEPA, with subsequent revisions, dated April 30, 1985.

- Preliminary Assessment Draft Final Report, prepared for the USEPA and dated June 20, 1986.

- Site Investigation Report, prepared for the USEPA and dated December 22, 1986.

- New York State Hazardous Waste Disposal Questionnaire, dated September 20, 1984.

- Historical Data Base, Buffalo Avenue Plant, Volumes I-III dated August 1, 1984; Volume IV dated March 1980, September 22, 1980, and April 1983.

- Data generated pursuant to the USEPA National Dioxin Strategy Initiative for the Buffalo Avenue Plant.

The conditions of this Module apply to: (1) all the SWMU's listed below individually or in combination; and (2) any additional SWMU's identified during the course of groundwater monitoring, field investigations, environmental audits or other means, as described in Module Condition B below.

Waste Storage areas: C-Area Pad, F-Area Pad, M-Area Pad, N-Area Pad, N-Area, U-42/47 Buildings, U-Area Pad, U-67 Building 3rd Floor, U-67 Building 2nd Floor-N, U-67 Building 2nd Floor-S, U-88 Building , U-Area Incinerator Unloading Pad, Building U-67 Truck Unloading Station, V-60 Building, V-61 Building, V-63 Building, V-81 Pad and Incinerator Railroad Siding near Building U-87.

Surface Impoundments: N-Area.

Landfills: Areas D and F.

Potential Landfill: N-Area.

Waste Piles: Areas U, V and W.

Spill Area: V-56.

Storage Tanks: Elemental Phosphorus Tank (near V-56), T-1 through T-6 (all near the U-Area incinerator), T-7 (near Building N-7), T-8 (near Building N-6), T-9 (near M-22), T-10 (M-22), T-11 (near M-15), T-12 (near Building C-36), T-13 (near Building C-36), T-14 (near Building C-36), T-15 (near Building C-23), T-16 (near Building F-23), T-17 (near Building M-15), T-18 (near Building M-1), T-19 (M-22 Inside), and Former Below-grade Tanks (U-Area).

Wastewater Treatment Units: Incinerator Neutralization System, near U-87; Mercury Wastewater Abatement System, near U-21 and U-5; API Separator, in N-Area; Phosphorus Chlorides Scrubber Effluent Neutralization System, near W-106; C-Area Chlorine "Kill Tank" Effluent Neutralization System, near C-32 and C-45; Area 3 Chlorine "Kill Tank" Effluent Control System, near U-31; Energy Blvd. Organic Collection System; M-28 Caustic Soda Addition Station; M-22 Scrubber Effluent Neutralization Sump; M-26 Tank Car, Tank Trailer and Equipment Washing Station; C-Pit in F-Area; Wastewater Vaporizer (U-79); and Activated Carbon Wastewater Treatment System and Associated Loading/Unloading and Filtering Areas, near U-67.

Incinerators: A-Area (near boilerhouse) and U-Area (near Building U-87).

Handling facility: A-Area Boiler Ash.

All sewers having handled hazardous waste or hazardous constituents.

Nothing herein shall constitute a waiver of past and/or future rights, claims or defenses of any kind under the laws, statutes or regulations of the United States, the State of New York or the common law by either hereto relating to the OCC Energy from Waste Plant located on Energy Boulevard.

B. Assessment of Newly Identified SWMUs

(1) The Permittee shall notify the Agency of any additional SWMU's not listed under Module Condition A or C, which are identified during the course of groundwater monitoring, field investigations, environmental audits or other means within fifteen (15) days of discovery.

(2) Within 60 days from notification of the Agency, the Permittee shall prepare a work plan and a proposed schedule of its implementation and completion for any newly identified SWMU which is known or suspected to have releases of hazardous waste or hazardous constituents to the environment. The plan shall include methods and specific actions as necessary to incorporate, upon approval by the Agency, information regarding each SWMU into the corrective action requirements of Module Condition E(1) below and any other applicable requirements of this Module. The plan must also summarize, at a minimum, the following information compiled from existing records for each unit:

(1) Type of unit
(2) Location of each unit on a topographic map of appropriate scale
(3) General dimensions and capacities
(4) Function of unit
(5) Dates that the unit was operated
(6) Description of the wastes that were placed or spilled at the unit
(7) Description of any known releases from the unit (to include groundwater data, soil analyses, and/or surface water data).
(8) Whether this unit, individually or in combination with other units, is a significant source of contaminant release described in Paragraph (1) of Module Condition E.

C. SWMUs Addressed in The S-Area "Stipulation and Judgment Approving Settlement Agreement"

The S-Area landfill and surface impoundments (area within the Site Barrier Wall) and the V-80 landfill (area within the Northern System

Barrier Wall) are SWMU's at the facility that are addressed under the terms of the S-Area "Stipulation and Judgment Approving Settlement Agreement." The geographical location of these areas is indicated in Figure N of this Module. Reference to the aforementioned document in this Permit shall not be construed as a waiver or modification of any party's rights, duties or obligations thereunder, including the releases provided therein.

D. General Requirements

(1) All work plans submitted pursuant to this Module shall include (a) Quality Assurance/Quality Control protocols to ensure that data generated is valid and supported by documented procedures, (b) health and safety plans to ensure that the health and safety of project personnel, Niagara Plant workers, and the general public are protected, (c) other plans, specifications and protocols, as applicable, and (d) a schedule for starting specific tasks, completing the work and submitting a final report. The QA/QC protocols and health and safety plans may incorporate by reference all or portions, as appropriate, of the relevant Supplemental Data Collection Program (SDCP) appendices described in subparagraph (E)(1)(a) below. Any laboratory to be used pursuant to such work plans must be deemed technically acceptable by the New York State Department of Environmental Conservation (the "Department"). A laboratory will be deemed technically acceptable if (1) it is on the Department's listing of approved laboratories certified to perform the designated analytical protocol; (2) it is not on the Department's listing of laboratories for the proposed analytical protocol, but is able to provide the Department with appropriate validation data on the designated analytical protocol, and upon acceptance of the validation data would subsequently be placed on the Department's listing of technically acceptable laboratories for that protocol.

(2) If the Agency disapproves (in whole or in part) a revised plan or report, it shall so notify the Permittee. The Agency and the Permittee shall thereafter attempt to resolve any issues raised in such disapproval. If any dispute cannot be resolved informally within 30 days following such disapproval, the Agency shall make a determination concerning its approval or disapproval of the final plan or report submitted by Permittee. Nothing herein shall be deemed to affect any arguments the Permittee may otherwise have pursuant to any applicable regulations or principles of administrative law that it has a right to obtain an administrative hearing or judicial review concerning Agency action undertaken pursuant to this Paragraph.

(3) The Permittee shall use its best efforts to carry out its obligations under this Module described herein and the schedule described in Task 1 of the SDCP. The Permittee shall not be deemed responsible for delays in complying with its obligations resulting from factors beyond Permittee's control, such as delays in governmental reviews and approvals, receipt of necessary

governmental permits and private authorizations for off-site activities, weather conditions and other factors deemed force majeure; provided, however, that Permittee uses its best efforts to make timely and complete response to Agency requests for information necessary to complete such reviews and approvals and otherwise uses its best efforts to secure governmental reviews, approvals, and permits and private authorizations; and further provided that the defense of force majeure will not be available if the Permittee does not give prompt notice to the Agency upon knowledge of such delay or potential delay (except delays in Department reviews and approvals) and act promptly through the use of its best efforts to minimize any such delay.

(4) The Department is issuing a 6 NYCRR Part 373 permit to Permittee which contains a module containing corrective action requirements substantively identical to the requirements of this Module. In addition, in the litigation brought on behalf of the Department pursuant to State of New York and Henry G. Williams, Commissioner of Environmental Conservation of the State of New York vs. Occidental Chemical Corporation, Occidental Chemical Holding Corporation and Occidental Petroleum Corporation, Civil Action No. 83-1393(c), Permittee may be required, as a result of a consent judgment or otherwise, to implement activities substantively identical to those described in Module Condition (E)(1)(a) and other provisions of this Module.

Because it is in the public interest that Permittee promptly complete its obligations under this Module and it is desirable that Permittee not be subject to inconsistent obligations, the Agency plans to take appropriate steps to ensure that to the extent consistent with the Agency's statutory and regulatory obligations, those responsible for the oversight and enforcement of this Module consult and coordinate their activities with those authorities responsible for the oversight and enforcement of substantively identical obligations applicable to Permittee, as described above.

(5) When preparing the submissions described in Module Condition E, Permittee shall take account of applicable guidance documents issued by the Agency and the Department.

(6) For the purposes of obligations required pursuant to Paragraph E which are contingent upon the approval by the Agency of a plan or report submitted by the Permittee, the term "approval" shall mean either the written approval of the submission by the Agency, or if the Agency disapproves or modifies the submission, the determination, after completion of any and all administrative procedures that may be applicable by operation of Paragraph (2) above, as to action to be undertaken concerning the submission. Nothing herein shall be construed as a waiver of any rights Permittee may have to seek judicial review of the determination described herein and a stay of the aforementioned obligations pending any such review, nor shall anything contained herein be construed as a waiver of the Agency's rights to oppose any such procedures.

(7) Each work plan submitted pursuant to Paragraph E(1) of this Module shall include plans for the treatment, storage, discharge or disposal of wastes to be generated by the activities described therein.

(8) Oversight activities;
[reserved]

E. Corrective Action Requirements

(1) RCRA Facility Investigation: The Permittee shall conduct a RCRA Facility Investigation (RFI) at the Buffalo Avenue Plant. This RFI shall include the following: a Supplemental Data Collection Program; a Dioxin Investigation; a Source Investigation Program; an Off-Site Investigation; and a Sewer System Evaluation Program.

(a) Supplemental Data Collection Program: Appendix I of this Module contains the work plan for the Supplemental Data Collection Program (SDCP), including Appendix A: Site Operations Plan; Appendix B: Environmental Health and Safety Plan; and Appendix C: Chemical Sampling and Quality Assurance Plan. These documents shall be referred to collectively herein as the SDCP, except as otherwise noted.

(i) The Study Area for the SDCP is indicated in Figure A of this Module.

(ii) For the purpose of this Module, the term "State" as it appears throughout the SDCP, shall mean the Department for tasks 1, 2, 3, 4, 6 and 7 of the SDCP and the Department and the Agency for Task 5 "Reporting" of the SDCP and any additional reporting tasks.

(iii) The Permittee shall begin implementation of the SDCP in accordance with the schedule in Figure B of this Module no later than 60 days after the effective date of this Permit.

(iv) A draft final SDCP Report, as specified in "Task 5 - Reporting" of the SDCP, shall be submitted by the Permittee to the Agency within 120 days after completion of Tasks 1 through 4 of the SDCP.

(v) The Agency shall advise the Permittee within 60 days following receipt of the draft final Report if it considers the draft report to be incomplete or if it believes that the Permittee has not completed any task specified in the SDCP.

(vi) The "Monitoring and Records" provision in Module I, Section E, Condition (9) of this permit shall apply to the SDCP.

(vii) Appendix I of this Module was initially prepared as a proposal to be attached to a negotiated stipulation between the State of New York and the Permittee to be entered in a matter in litigation between those parties pending in U.S. District Court. This litigation concerns the remediation of hazardous waste contamination at the Permittee's Buffalo Avenue Plant which is also the subject matter of this Module. It was anticipated that such a stipulation would be agreed upon and entered in the interim between the Public Notice of proposed issuance of this Permit and the effective date of this Permit. The Agency and the Department have reviewed the terms of Appendix I for consistency with the requirements for corrective action pursuant to RCRA and 6 NYCRR Part 373 and have determined that the data proposed for collection pursuant to Appendix I would satisfy some of the data collection requirements for RCRA corrective action. Appendix I was therefore incorporated into this Module as one of the program elements of a comprehensive RFI to avoid duplicative requirements for the generation of data pursuant to both the litigation and this Module. The Permittee is required to implement Appendix I as a condition of this Module and Permit independent of the status of this document and the stipulation in the related litigation in U.S. District Court. Since a stipulation has not been entered in the U.S. District Court prior to the effective date of this permit, certain revisions as described below are being made to Appendix I. These revisions shall be in effect for the time period between effective dates of this Permit and the negotiated stipulation. The revisions are as follows:

- Paragraph E.7 hereby supercedes Task 6 subparagraph (d) "SDCP Modification" on Page 35 of Appendix I except modification of the Site Operations Plan (SOP), the Environmental Health and Safety Plan, and the Chemical Sampling and Quality Assurance Plan (QA). Modifications to these plans may be made as specified, respectively, in Section 13.0 of the SOP, Section 2.0 of the Safety Plan, and Section 16.0 of the QA Plan.

- All supporting documentation for Appendix I of this module shall be subject to Standard Condition D.(16)(b) of Module I.

(b) Dioxin Investigation: Pursuant to the Agency's Dioxin Strategy Investigation (DSI) program, a preliminary investigation was made of releases or potential releases of dioxin from the former trichlorophenol (TCP) production area (the D-7 Area) at the Buffalo Avenue Plant. This preliminary investigation indicates that additional investigative activities are necessary in the D-Area, the area north of Buffalo Avenue between 53rd and 56th Streets indicated on Figure K (hereinafter the "Radio Tower Property"), the U-Area, and the 47th Street and Iroquois Street sewers. Investigations of these areas shall proceed as follows:

(i) Within 60 days after the effective date of this permit, Permittee shall submit a draft work plan which addresses the investigative activities discussed below. The purpose of the work plan will be to better define the extent of releases or threatened releases from the areas described below to evaluate remedial alternatives for such releases or threatened releases. The work plan shall consist of the following activities: (1) soil sampling in the U-Area; (2) soil sampling south of former building D-7 between the D and F vectors from the DSI program; (3) soil sampling from the railroad track in the D and M Areas; (4) soil sampling west of the C-1 sampling point of the aforementioned preliminary DSI investigation; (5) soil sampling within and adjacent to the boundary of former building D-7; (6) sediment sampling from the sanitary sewer in the vicinity of the D-7 Area and at the Iroquois Street monitoring station; (7) sediment sampling in the 47th Street sewer, downstream of all flows from the Permittee but before admixture with flows from any other facility; (8) soil sampling from the bedding of the sanitary sewer and other utilities in the D-Area; (9) installation and sampling of overburden groundwater monitoring wells in and adjacent to the D-7 Area; and (10) sampling of existing well 39A.

(ii) It is currently planned that, prior to the effective date of this Permit, an additional investigative work plan with respect to the Radio Tower Property will be developed. If such investigative activities have not been completed by the effective date of the Permit, OCC will submit a draft work plan (within 60 days following such effective date) to complete the investigation under this Module.

(iii) The Permittee shall carry out dioxin investigations as required in the SDCP, as specified in paragraph (1)(a) above.

(iv) Following submission of the work plans set forth in subparagraphs (i) and (ii) above, subsequent activities for each work plan will proceed in accordance with the following schedule:

- Meeting between the Permittee, the Agency and the Department to discuss draft work plan comments within 30 days of the Permittee's receipt of draft work plan comments.

- Submission of revised work plan to the Agency within 30 days of the above-described meeting.

- Initiation of final work plan implementation within 30 days of Agency approval.

The results of the DSI investigation already carried out as well as other available information should be used by the Permittee to develop the draft work plans specified in this section.

(v) Within 60 days following completion of the approved work plans specified in (i) and (ii) above, the Permittee shall submit to the Agency for approval a draft Dioxin Investigation (DI) report which addresses all of the data collected.

(vi) It is anticipated that the data compiled as a result of the final DI report and/or the data developed under the SDCP as set forth in subparagraph (iii) above, may be sufficient to provide the basis for evaluating and selecting alternatives, as appropriate, for the remediation of sources of releases or threatened releases of dioxin at and from the Buffalo Avenue Plant. However, additional data will be collected subsequent to completion of the work plan if necessary to determine the nature and extent of, significant source areas of releases or threatened releases and evaluate source specific remedial controls for such releases or threatened releases; provided, that such additional data shall not be required if then available data indicate that the extent of such source areas of release or threatened release is greater than that for which any applicable source specific remedial controls would be appropriate. The Permittee may include in any such additional work plans, to the extent practicable, the coordination of dioxin sampling with sampling proposed in any subsequent work plan to be developed under the RFI and CMS processes described herein, provided such coordination does not delay the collection of the dioxin data or the remediation of those releases or threatened releases for which sufficient data exist to select, design, and implement remedies. It is further provided that nothing contained in this subparagraph shall be construed as limiting the scope of data to be collected pursuant to the RFI and CMS processes for remediation purposes other than source specific remdial controls.

(vii) Any information developed pursuant to the dioxin investigations described above will be utilized in the corrective measures process described herein.

(c) Source Investigation Program: In addition to the SDCP and DSI activities required in subparagraphs (1)(a) and (b) above, the Permittee shall implement a Source Investigation Program (SIP). The purpose of the SIP will be to define the extent of significant source areas of hazardous waste or hazardous constituents which have resulted from releases at solid waste management units on the site. Nevertheless, if data collected under the SIP work plans described below indicate that the extent of a significant source is greater than that for which source specific remedial controls would be appropriate, the Permittee need no longer continue to define the extent of the significant source under the SIP. Subsequently, as part of the Corrective Measures Study described in Paragraph (2) below, the Permittee will use the information developed under the SIP to evaluate whether it is appropriate to utilize area-specific source control technologies to remediate such source areas. The SIP shall be implemented in two phases, as follows:

(i) The Permittee shall submit a Phase I SIP work plan to the Agency within 180 days after the effective date of the Permit. That work plan shall address SWMU's in the following areas: C, F, N, U, and D (excluding the D-7 area described in subparagraph E(1)(b)). The work plan shall be based in part upon an evaluation of all previous information and data gathered. The draft Phase I SIP work plan shall provide for the characterization of the soil, air and groundwater. The procedures outlined in Figure O shall be utilized to characterize those media. The historical data base and the work performed under the SDCP should provide information to help characterize the extent of significant sources in the groundwater. Nevertheless, if following the collection of soils data under the Phase I SIP and all applicable groundwater data required to be collected under Task 4(a) of the SDCP, it is determined that there is insufficient groundwater information to satisfy the purpose of the Phase I SIP, a plan to collect additional groundwater data shall be developed and implemented within a reasonable period of time. Thereafter, the parties shall proceed in accordance with a schedule such as the one described in subparagraph (1)(b). Within 60 days following the completion of the Phase I work plan, the Permittee will submit to the Agency a draft report summarizing the data collected. All data contained in the approved Phase I SIP data report will be utilized in the development of a CMS described in Paragraph (2) below.

(ii) Following submission and review of the groundwater data developed under the SDCP, the Permittee, the Agency, and the Department shall meet to discuss the groundwater data and other available information. If such data and information indicate the presence of a significant source area (or areas) of organic or inorganic hazardous waste or

hazardous constituents, then a Phase II SIP work plan shall be developed to define the extent of such source areas. The Phase II SIP work plan need not address any significant source areas which, in light of the available information, were adequately characterized under the Phase I SIP. If it is determined that a Phase II SIP is necessary, the Permittee shall submit a Phase II SIP work plan to the Agency within 60 days of such determination. Thereafter, the parties shall proceed in accordance with a schedule such as the one described in subparagraph (1)(b). The Phase II work plan will utilize an investigative approach similar to the approach specified above under the Phase I SIP.

(d) Off-Site Investigation: (i) The Permittee shall implement an Off-Site Investigation (OSI) to investigate the nature, rate, and extent of release of hazardous waste or hazardous constituents across and beyond the SDCP study area boundary, as shown on Figure A of this Module which will be utilized in a CMS pursuant to Paragraph (2) below to determine any response measures necessary to protect human health or the environment.

Within 30 days following completion of Tasks 1-4 of the SDCP, OCC, the Agency and the Department shall meet to discuss the anticipated scope of the OSI. Subsequent meetings shall also be conducted, as appropriate, prior to submission of the draft OSI work plan.

Within 30 days following submission of the draft final SDCP report, Permittee shall submit to the Agency the OSI work plan which shall provide applicable information necessary to carry out the investigation. Once the draft OSI work plan is received by the Agency, it will be reviewed and commented upon by the Agency. Subsequent activities will proceed in accordance with a schedule such as the one described in subparagraph (1)(b)(ii); provided, however, Permittee shall not be required to submit a final OSI work plan until 30 days following Agency approval of the final SDCP report.

(ii) Except as provided in the SDCP, Permittee is not required herein to conduct investigative or remedial activities within the Falls Street Tunnel or the New York State Power Authority conduits. However, nothing contained herein shall be construed to preclude the Agency from modifying this Permit or from taking any legal action in another forum to expedite off-site monitoring by the Permittee, with respect to the hydrological influence of the Falls Street Tunnel or the New York State Power Authority conduits upon the migration of groundwater from the OCC Niagara Plant property, based upon information developed as a result of a study conducted by the City of Niagara Falls pursuant to an Addendum to Consent Decree in United States, et al. v. City of Niagara Falls, et al. (Civ. Act. No. 81-363(C),

W.D.N.Y. March 1986), and the SDCP, or any information developed independent of, or subsequent to, said Study and/or the SDCP, concerning the nature and extent of chemical contamination in the Falls Street Tunnel in the City of Niagara Falls. Any such subsequent action could include, without limitation, modification of this permit, or legal action pursuant to any existing litigation in federal or State court, or any subsequent litigation that may be brought pursuant to applicable federal or State law to address such contamination in the Falls Street Tunnel. Similarly, nothing contained herein shall be construed to preclude or affect defenses or other rights Permittee may have regarding any action described herein.

(e) Permittee is not required herein to investigate conditions in the Niagara River sediments. However, nothing contained herein shall be construed to preclude the Agency from modifying this Permit or taking legal action in another forum to require the Permittee to investigate and address conditions in the Niagara River sediments. Similarly, nothing contained herein shall be construed to preclude or affect defenses or other rights Permittee may have regarding any action described herein.

(f) Sewer Evaluation Program:

(i) Within 120 days following the effective date of this Permit, the Permittee shall submit to the Agency a work plan to address, at the locations specified below, those components of the sewer system at the Niagara Plant which currently or previously handle(d) hazardous waste or hazardous constituents. The purpose of the work plan shall be to determine whether exfiltration or other outward leakage from those portions of the sewer system located downstream of lift stations H-20, K-28, and M-24 is causing or contributing to the release of hazardous waste or hazardous constituents. If the data indicate that there is such continuing exfiltration or leakage from such portions of the sewer system, Permittee shall promptly characterize and quantify such exfiltration or leakage and submit such data to the Agency for a determination, pursuant to Paragraph E.(4), of whether or not interim corrective measures are necessary. In addition, any data collected pursuant to such a work plan, as well as any other data collected during the RFI which are indicative of any past release, will be utilized pursuant to subparagraph (ii) below.

(ii) If data collected during the RFI program indicate that there are, or have been, actual or threatened releases, other than the continuing releases by exfiltration or leakage which were addressed by the work plan required in subparagraph (i) above, from any portion of the sewer system at the Plant which currently or previously handle(d) hazardous waste or hazardous constituents, the Permittee

shall submit a work plan to the Agency, according to a schedule agreed upon by the Agency, which provides for the collection of data concerning those portions of the sewer system where that condition exists. If the data indicate that there is a continuing release of hazardous waste or hazardous constituents, or that there is a threat of such a continuing release if inactive segments of the sewer system were to be reactivated, Permittee shall promptly characterize any such release and submit such a characterization to the Agency for a determination, pursuant to Paragraph E.(4), of whether or not interim corrective measures are necessary. In addition, the data collected pursuant to the work plan, if any, described herein, as well as any other data collected during the RFI (including work conducted pursuant to subparagraph (i) above) which are indicative of any past release, will be utilized in the Source Investigation Program described in Paragraph 1(c).

(2)(a) Corrective Measure Study: No later than 60 days after approval of the final SDCP Report and the Phase I SIP data report, Permittee shall submit to the Agency a scoping plan that will outline the remedial alternative(s) which Permittee proposes to consider in a Phase I Corrective Measures Study (CMS). The Permittee shall submit a draft Phase I CMS within 90 days after a scoping plan is approved by the Agency. The Phase I CMS will study remediation of releases of hazardous waste or hazardous constituents in areas, if any, where no further RFI activities are required and where corrective measures would not be inconsistent or incompatible with future measures that may be required after completion of the RFI described in Paragraph (1). Where Permittee demonstrates that corrective measures in an area would be inconsistent or incompatible with future measures that may be required after completion of the RFI described in Paragraph (1), the CMS for that area will be deferred and consolidated with the CMS described in subparagraph (b) below.

(b) No later than 60 days after approval of all final reports prepared under the RFI described in Paragraph (1), the Permittee shall submit to the Agency a scoping plan that will outline the remedial alternative(s) which Permittee proposes to consider in a Phase II CMS. The Permittee will submit a draft Phase II CMS within 120 days after a scoping plan is approved by the Agency. The Phase II CMS will study the remediation of releases of hazardous waste or hazardous constituents identified as a result of the RFI other than releases addressed in the Phase I CMS described in subparagraph (a).

(c) At a minimum, the CMS shall address the following tasks:

- Identification and development of the corrective measure alternative or alternatives;

- Evaluation of the corrective measure alternative or alternatives from a technical, environmental, human health, cost, and institutional standpoint;

- Justification and recommendation of the corrective measure or measures; and

- Reporting procedures including progress and final reports.

(d) When a draft CMS is received by the Agency, it will be reviewed and commented upon by the Agency. Thereafter, the Agency, the Department and the Permittee will proceed in accordance with the following schedule:

- Meeting between the Permittee, the Agency and the Department to discuss draft CMS comments within 30 days of Permittee's receipt of draft CMS comments.

- Submission of revised CMS to the Agency within 90 days of the above-described meeting.

(3) (a) Corrective Measures Implementation: Within 120 days of Agency approval of each of the final CMS required in subparagraphs (2)(a) and (b), the Permittee shall submit to the Agency a draft Corrective Measure Implementation (CMI) program. The CMI program shall include, at a minimum, the following items:

- A CMI program plan which includes (i) a program management plan and (ii) development of and/or participation in a community relations plan as required pursuant to any applicable regulations.

- Corrective measure design, including plans and specifications, operation and maintenance plans, cost estimate (including a draft assurance of financial responsibility to be executed pursuant to subparagraph (b) below), project schedule, construction quality assurance objectives, health and safety plan, and design phases;

- Corrective measure construction, including responsibility and authority, construction quality assurance personnel qualifications, inspection activities, sampling requirements, and documentation; and

- Reports, including progress and final reports.

(b) Once the draft CMI program is received by the Agency, it will be reviewed and commented upon by the Agency. Subsequent activities will proceed in accordance with the following schedule:

- Meeting between the Permittee, the Agency and the Department to discuss draft CMI program comments within 30 days of the Permittee's receipt of draft CMI program comments.

- Submission of revised CMI program to the Agency within 90 days of above described meeting. This submission shall include documentation of assurances of Permittee's financial responsibility, as required by Section 3004(u) of RCRA and applicable regulations, for completing the corrective action measures specified in such revised CMI program. Such documentation will utilize a mechanism specified in 40 CFR Section 264.151 in a manner which reflects the amount of the cost estimate for the specified corrective measures.

(c) Following submission of the final CMI program, the Agency will develop a draft permit modification for public notice. The final permit modification will require the Permittee to implement all the corrective measures specified in the draft permitted CMI program, as modified during the permit process. The final permit modification will also require Permittee to apply for, in accordance with a schedule to be approved by the Agency, and use best efforts to obtain any additional permits or authorizations required for the treatment, storage, discharge, or disposal of wastes to be generated by the CMI activities. Nothing contained herein shall be deemed to preclude the Permittee from raising, during such CMI permit modification process, any issues it may have concerning such treatment, storage, discharge or disposal or any other issues related to the proposed permit modification.

(d) If corrective action measures specified in the revised CMI program described in subparagraph (b) are significantly changed as a result of the permit modification process, Permittee shall submit appropriate amendments to the assurances of financial responsibility described in subparagraph (b) within 60 days following the effective date of the modification.

(4) Interim Corrective Action: If at any time it is determined by the Agency that the levels of any release or potential threat of release of hazardous waste or hazardous constituents from a SWMU or a combination thereof may present an immediate threat to human health or the environment or that such condition jeopardizes OCC's ability to comply with any governmental permit, a draft interim corrective measures study addressing immediate corrective measures shall be submitted to the Agency for approval within 30 days of notice of such a determination. This study shall consider, among other relevant factors, the character, magnitude, rate of release, the proximity to population, the exposure pathways, the effects of delayed action, and evaluations of appropriate interim corrective measures. Upon approval of the study, the Permittee shall carry out the required interim corrective measures as specified in the study. Nothing herein shall preclude OCC from taking immediate action to address the conditions described herein and promptly so notifying the Agency.

(5) (a) Other Activities: Prior to the determination of remediation activities developed through the CMS studies required in paragraph (2) above, the Permittee is required to carry out the following additional activities:

(i) A general-housekeeping inspection of the A-1 Boilerhouse area shall be continued on a monthly basis to identify any surface accumulation of fly ash. See Figure C. If any fly ash has accumulated, it will be collected and placed into the containers currently used for fly ash transport before the next inspection. All operative ash handling equipment will also be inspected on a monthly basis. Any damage to these items will be repaired before the next monthly inspection. The inspection report and any repairs shall be documented in the Operating Record maintained pursuant to RCRA.

(ii) The sump at the Building U-67 truck unloading station, as shown on Figure D, shall be cleaned periodically as follows:

(a) Buildup of materials on the concrete surfaces of the sump will be hand scraped and placed in 55-gallon drums;

(b) Bottom sediment within the trench will be removed by hand shovelling and placed into 55-gallon drums;

(c) The contents of the 55-gallon drums will be stored and disposed in an environmentally sound manner following standard plant procedures.

(d) The sump will be inspected on a monthly basis to identify buildup of materials. Any such buildup will be removed, as described in (a) and (b) above, prior to the next inspection. The inspection and disposal of any material will be documented in the Operating Record maintained pursuant to RCRA.

(iii) (a) All paving/covering at areas identified in Figures D, E, F, G, H and I as "Area to be Paved," and Figure J as "Paved," shall be inspected annually in the spring of each year. Appropriate maintenance and repair of these areas will be carried out within the upcoming construction season. All inspections and repairs will be recorded in the Operating Record maintained pursuant to RCRA.

(b) The fence shown on Figure K shall be maintained. Appropriate maintenance and repair of this fencing area will be carried out no later than two weeks after the need for such repair is determined. All repairs will be recorded in the Operating Record maintained pursuant to RCRA.

(b) For locations F-8 and D-28, as shown in Figures L and M, respectively and as described in the document: "Site Investigation Report," prepared for the Agency and dated December 22, 1986, the Permittee shall initiate the following activities within 120 days of the effective date of this permit:

(i) Decontamination and removal of all tanks within the diked areas;
(ii) Removal of surface liquids within the diked areas;
(iii) Removal of sediments and cleaning of internal surfaces at the F-8 diked area;
(iv) Regrading and paving of the D-28 and F-8 diked area with approximately 3 inches of asphalt;
(v) Storage, treatment and disposal of all collected materials pursuant to all applicable Federal, State and local regulations; and
(vi) Documentation of the foregoing activities.

(6) Compliance With Governmental Requirements: During investigative activities and interim corrective measures (including, but not limited to, equipment decommissioning, excavation and unit demolition) required under this Module, the Permittee shall ensure that the transportation, treatment, storage, discharge, and disposal of all contaminated materials generated as a result of such activities (including, but not limited to, soils, sediments, liquids, tanks, pipes, pumps, rubble and structural materials) are performed in an environmentally sound manner pursuant to all applicable Federal, State and local requirements. Nothing in the module shall be construed to require Permittee to proceed in a manner which is in violation of any such requirements.

(7) Modifications: If the Agency determines that additional or modified investigative or corrective measures are necessary or appropriate to achieve the objectives of the corrective action program for the Buffalo Avenue Plant, this Module may be modified at a later date.

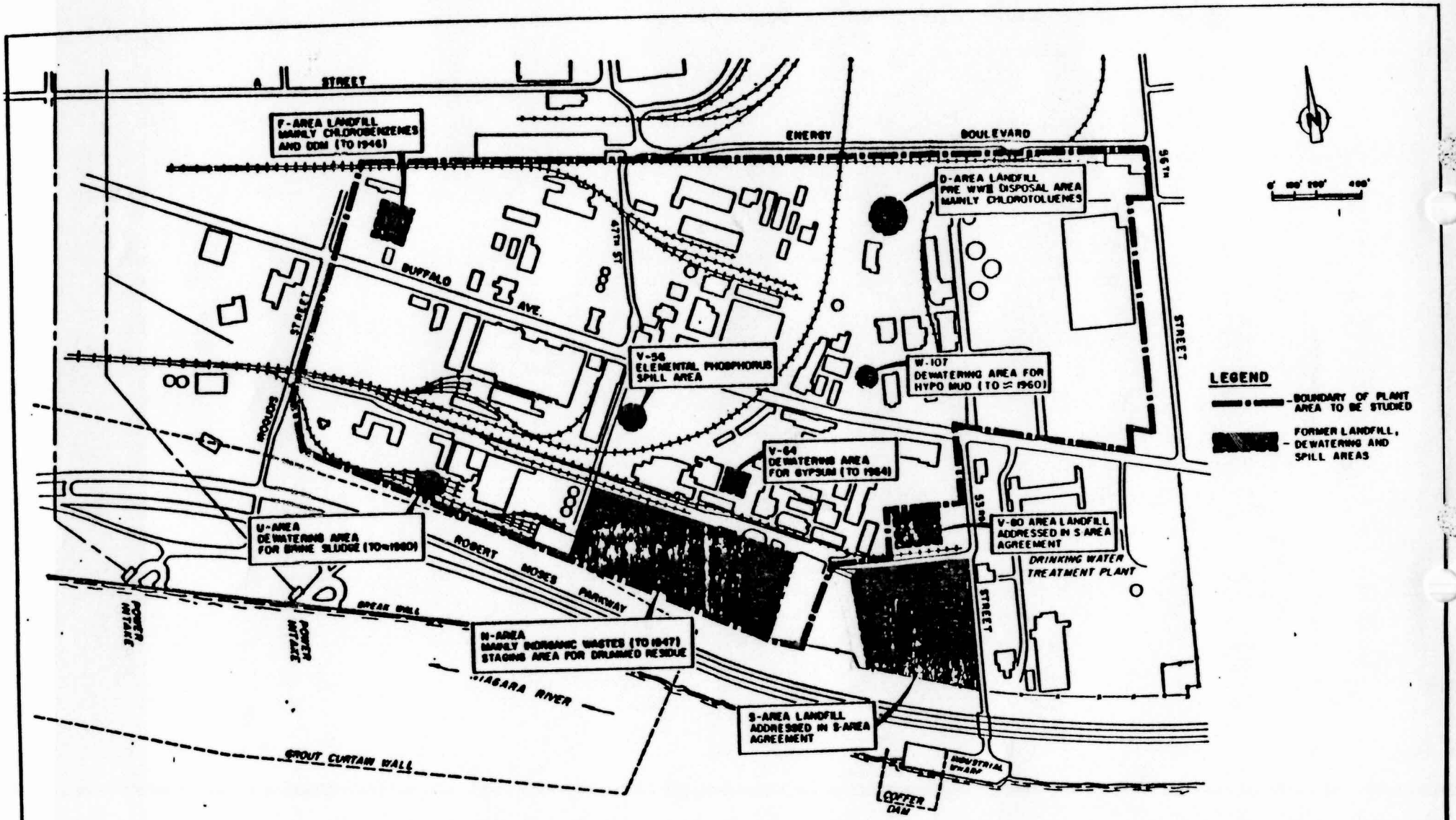
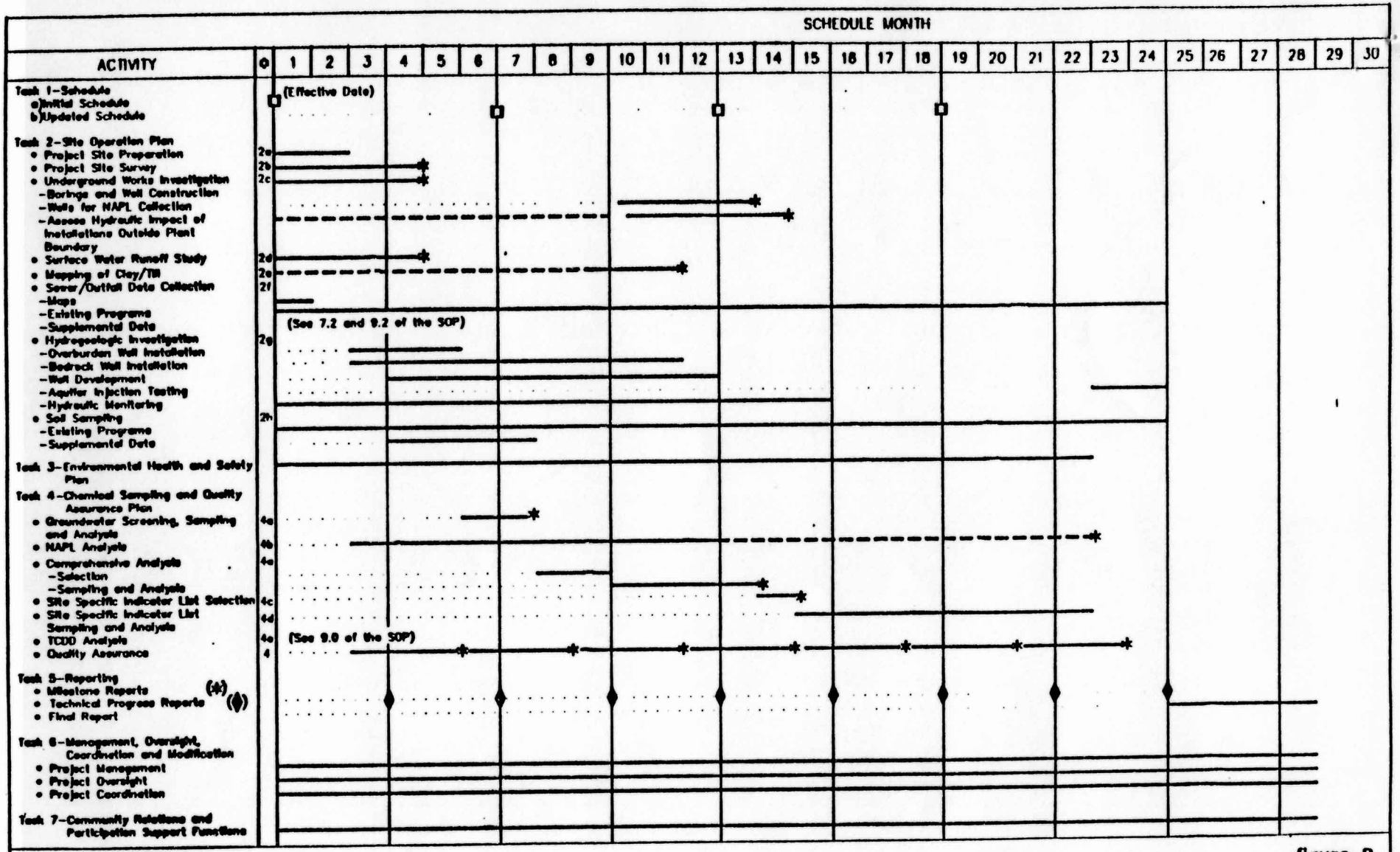


figure A

AREA OF NIAGARA PLANT
TO BE STUDIED
Niagara Plant

CRA



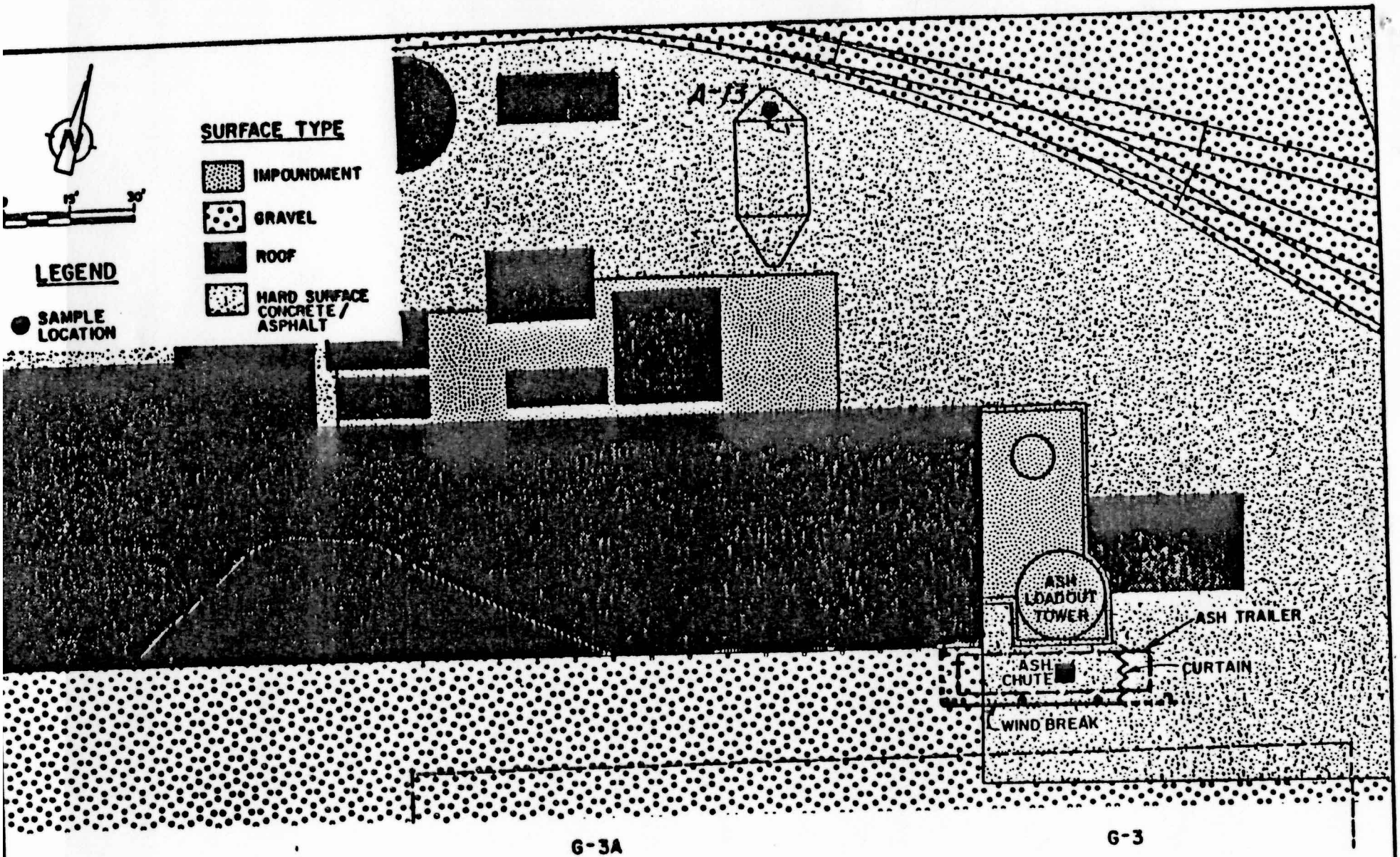
Φ - TASK REFERENCE

figure 8

SDCP - SCHEDULE
Niagara Plant

CRA

0426.27/08/87-41-F.0



LEGEND

— — — WIND BREAK EXTENSION

figure C

INSPECTION AREA A
WORK PLAN
Niagara Plant, O.C.C.

G-2

CRA

0626-27/08/87-41-F-0

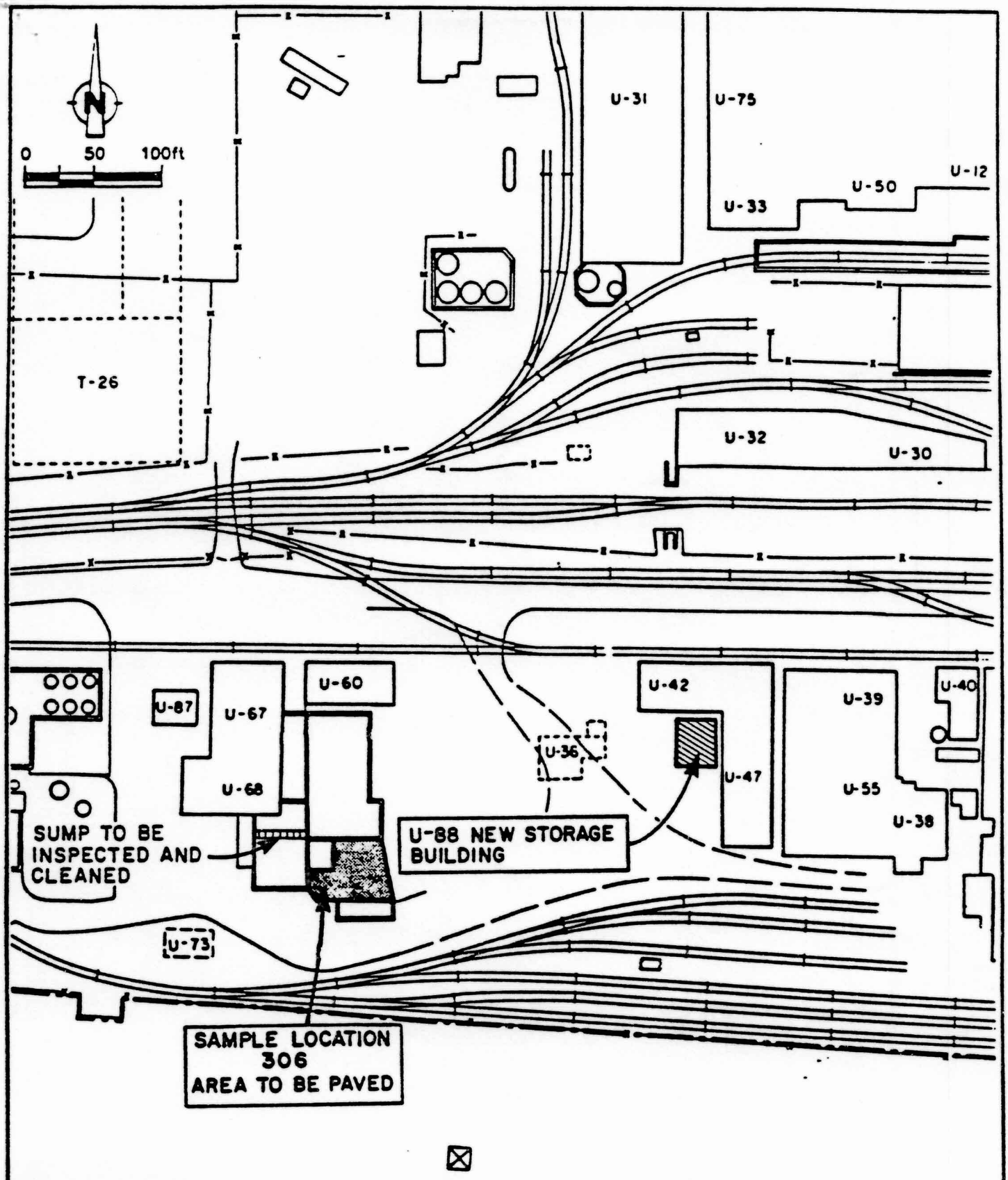


figure D

Niagara Plant, QC.C.

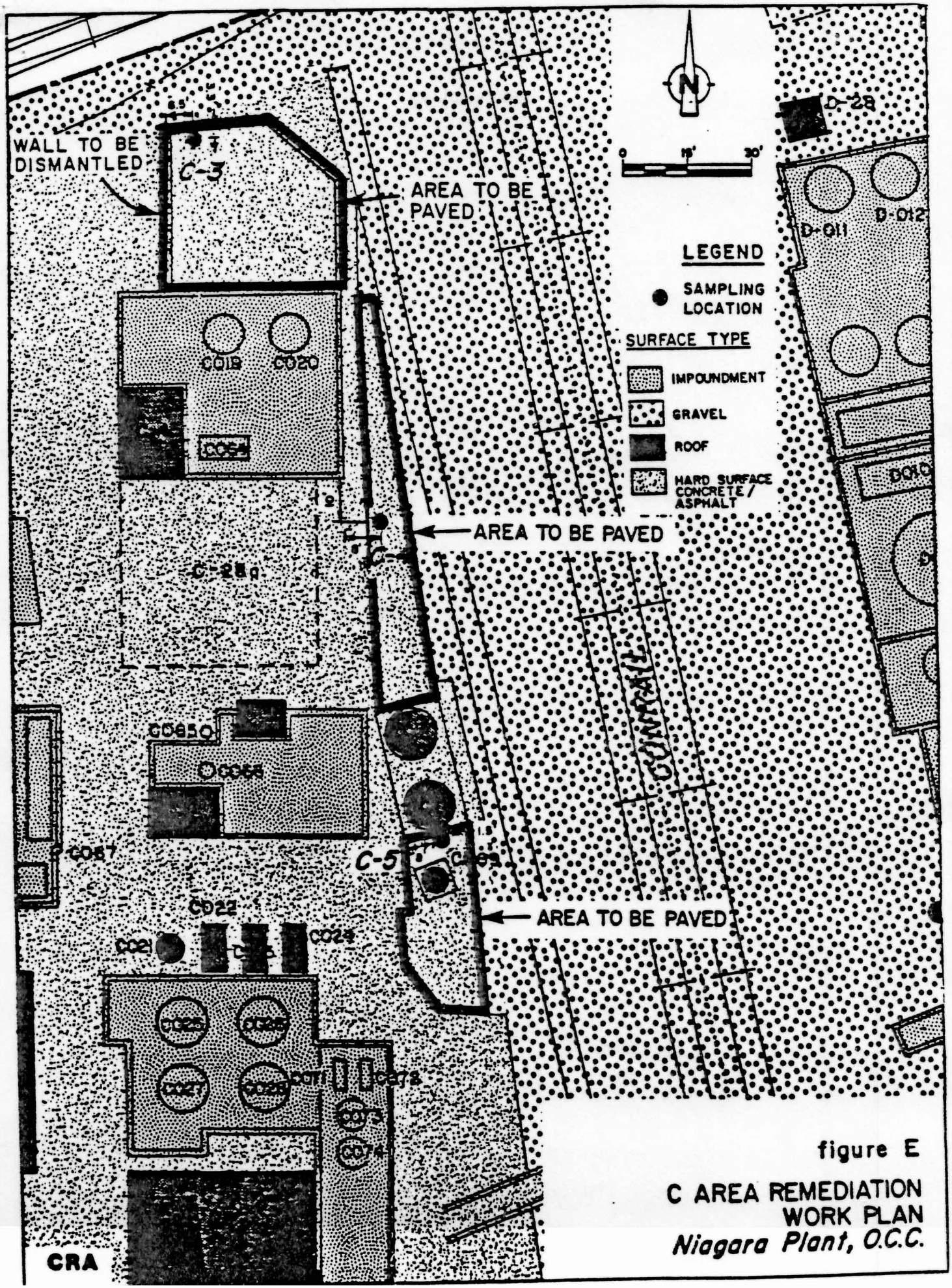


figure E

C AREA REMEDIATION
WORK PLAN
Niagara Plant, O.C.C.

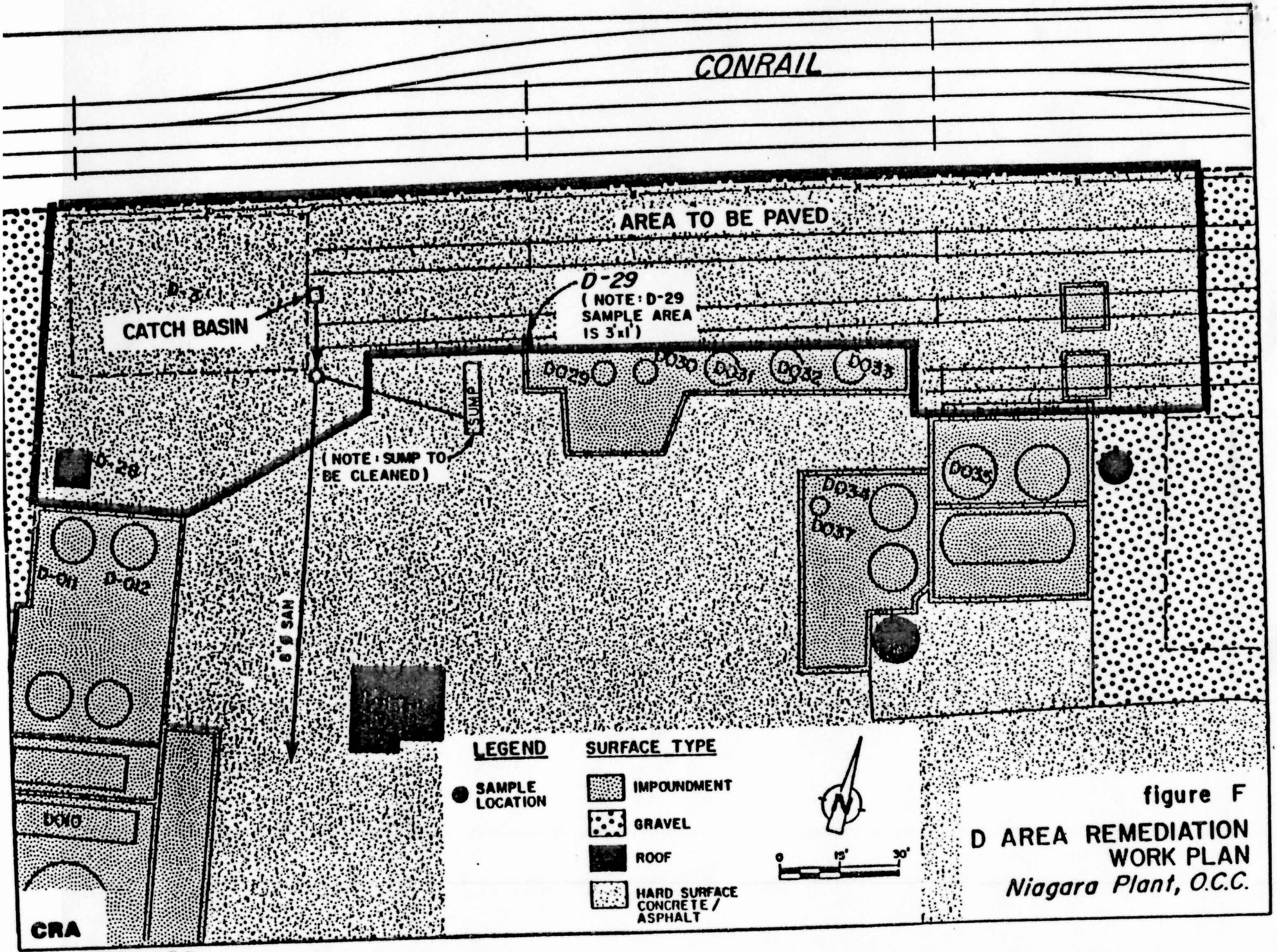
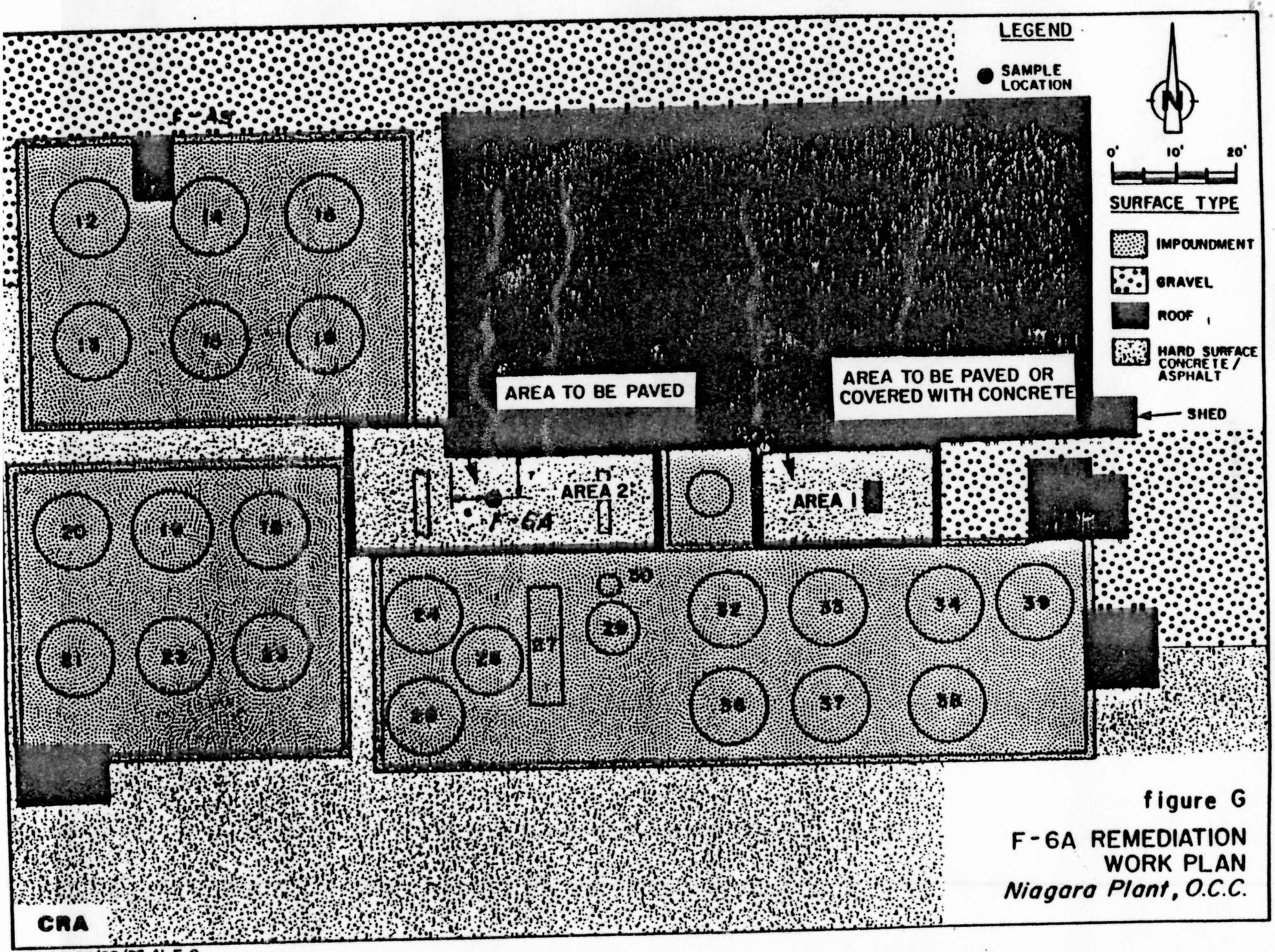


figure F

D AREA REMEDIATION WORK PLAN

Niagara Plant, O.C.C.

0626-27/08/87-41-F-0



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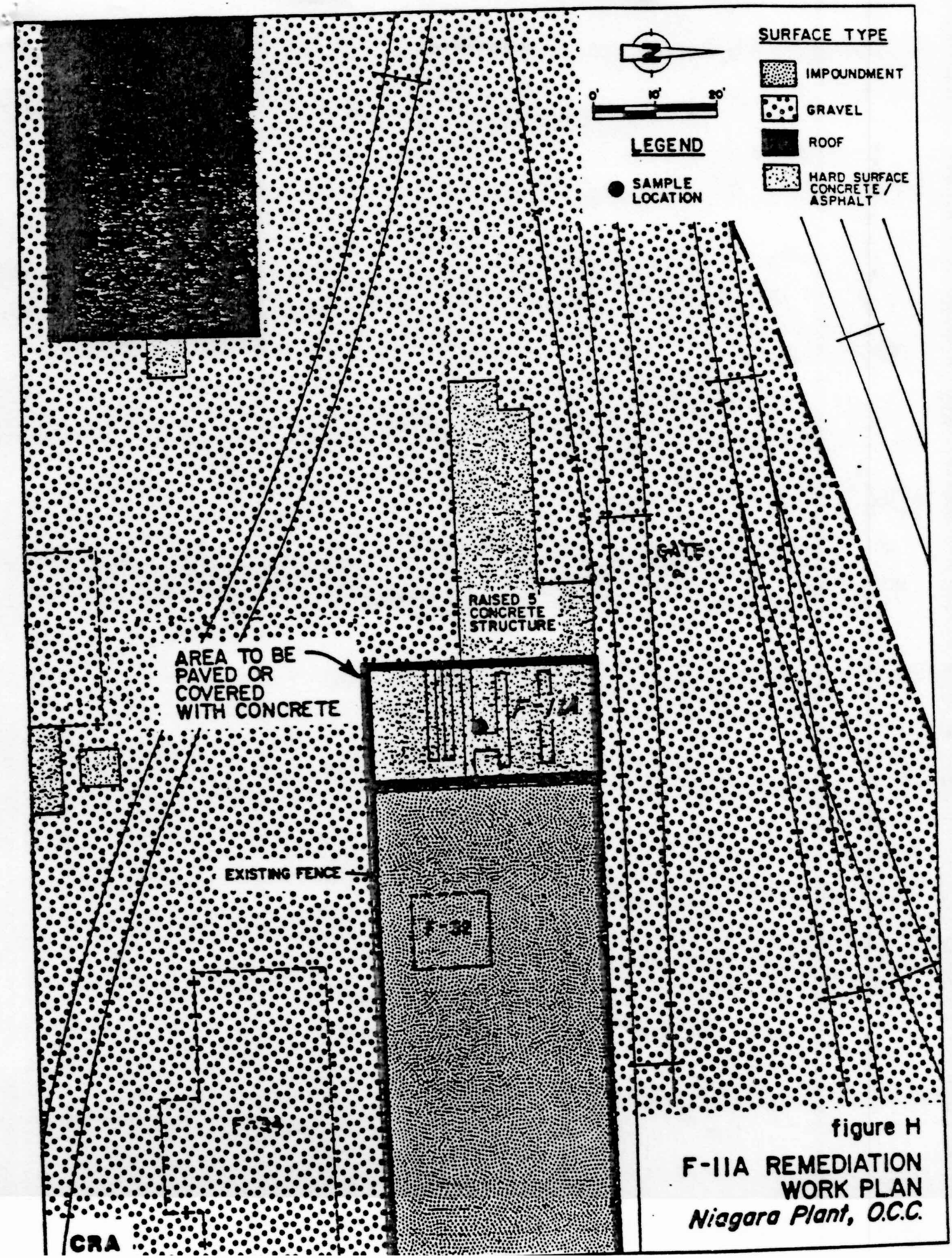
F-6A REMEDIATION WORK PLAN

Niagara Plant, O.C.C.

0626-27/08/87-41-F-0



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F-11A REMEDIATION WORK PLAN

Niagara Plant, O.C.C.

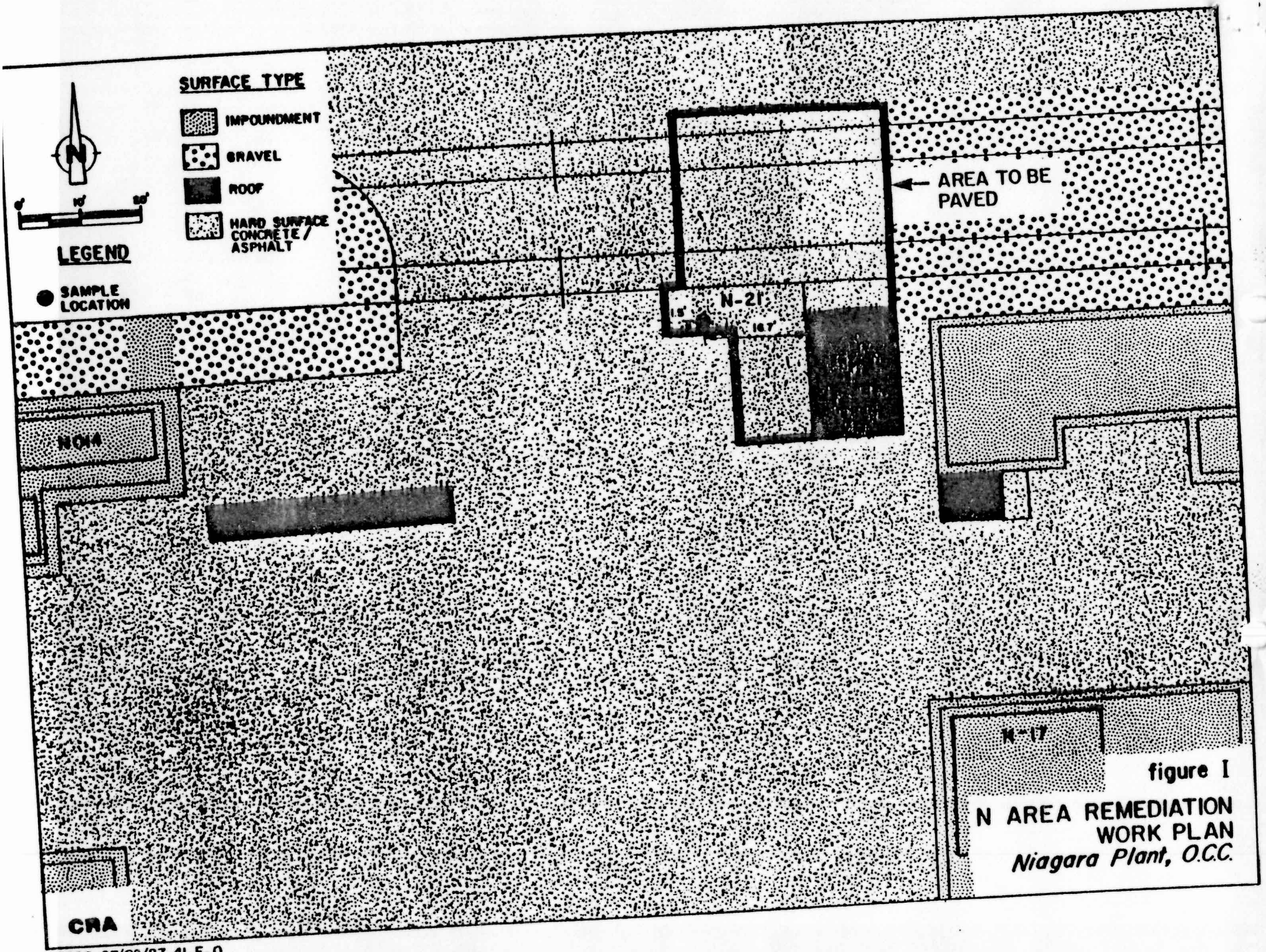
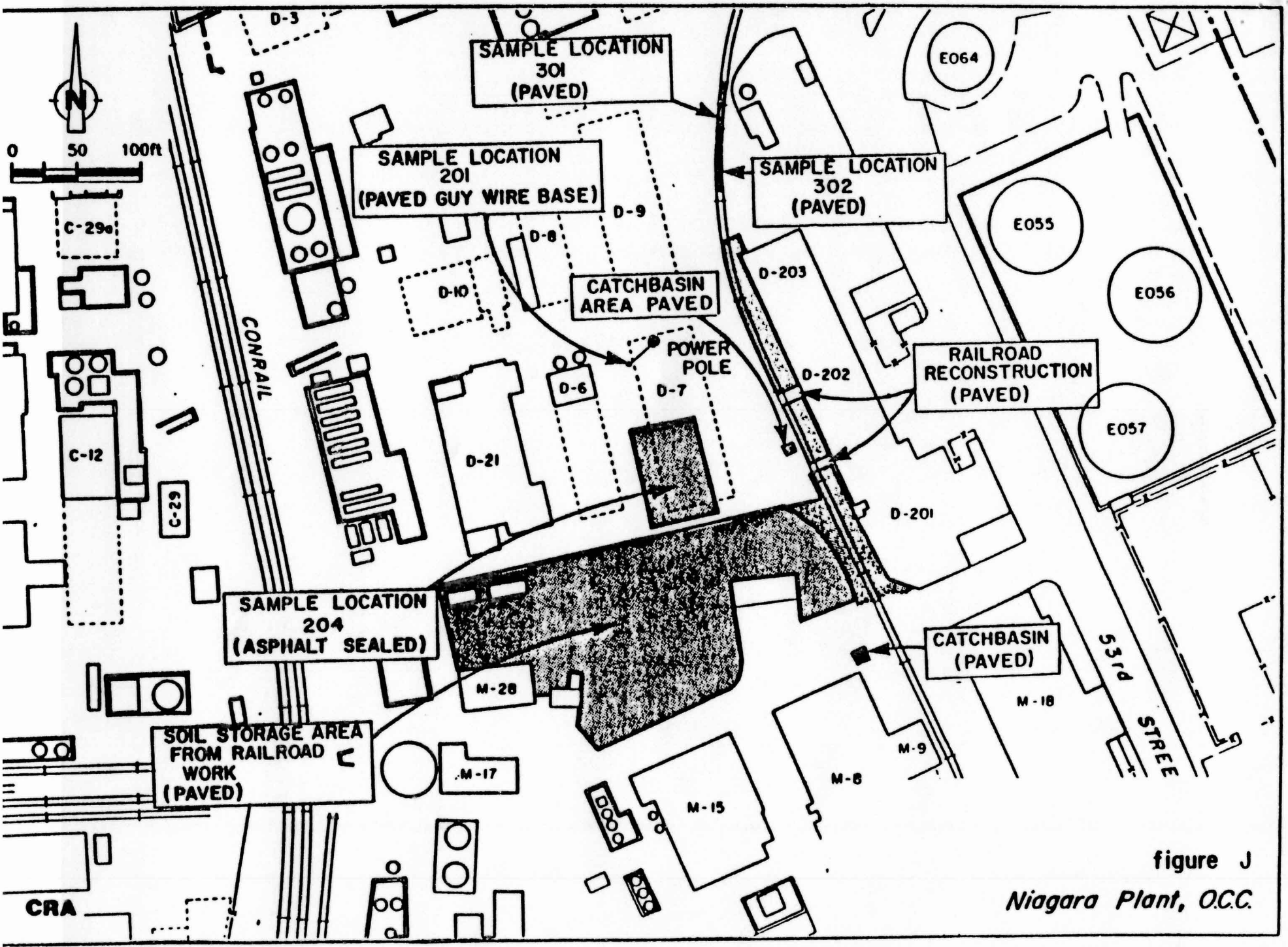


figure I

N AREA REMEDIATION WORK PLAN

Niagara Plant, O.C.C.

0626-27/08/87-41-F-0



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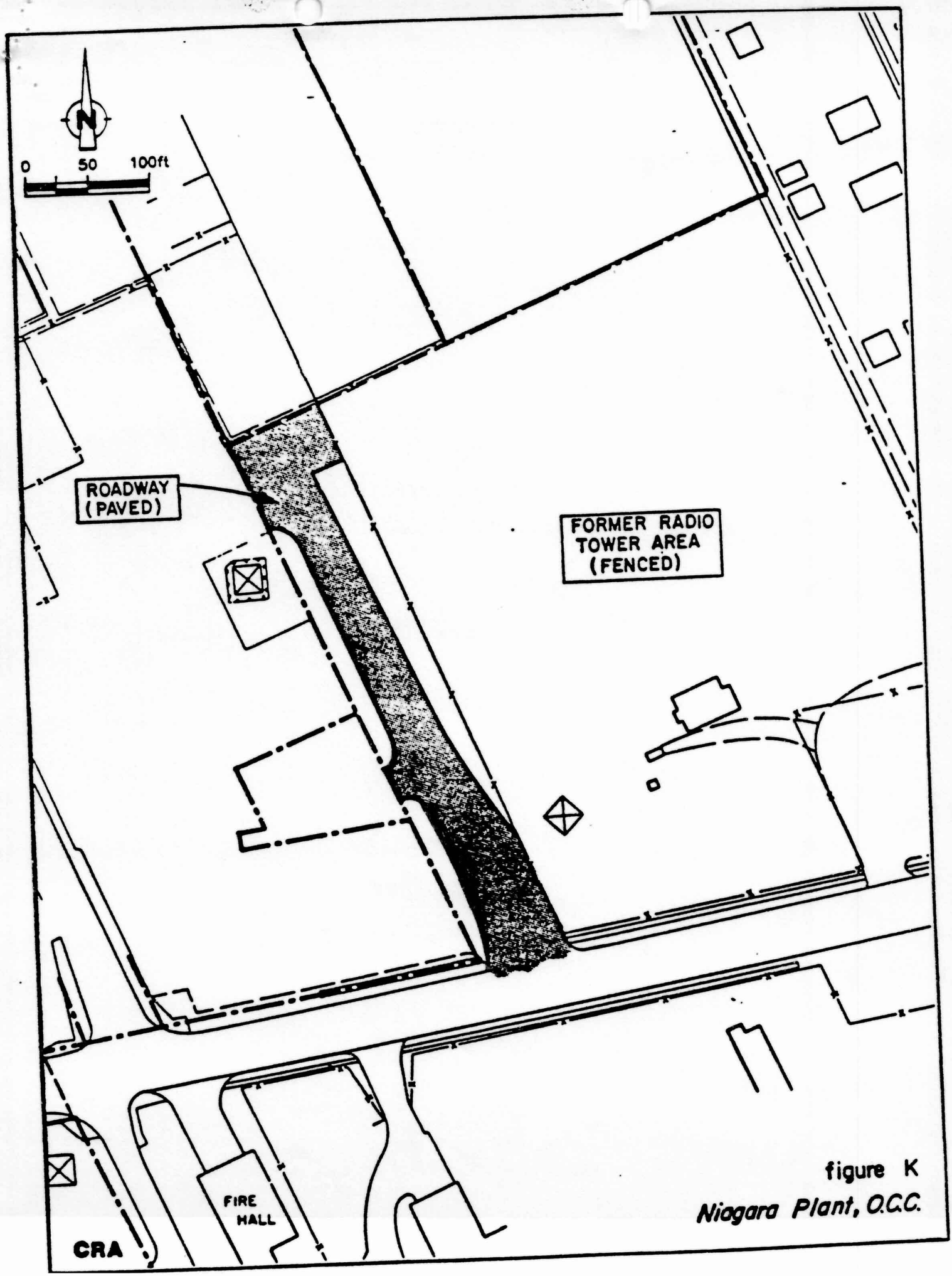
Niagara Plant, O.C.C.

0626-27/08/87-41-F-0



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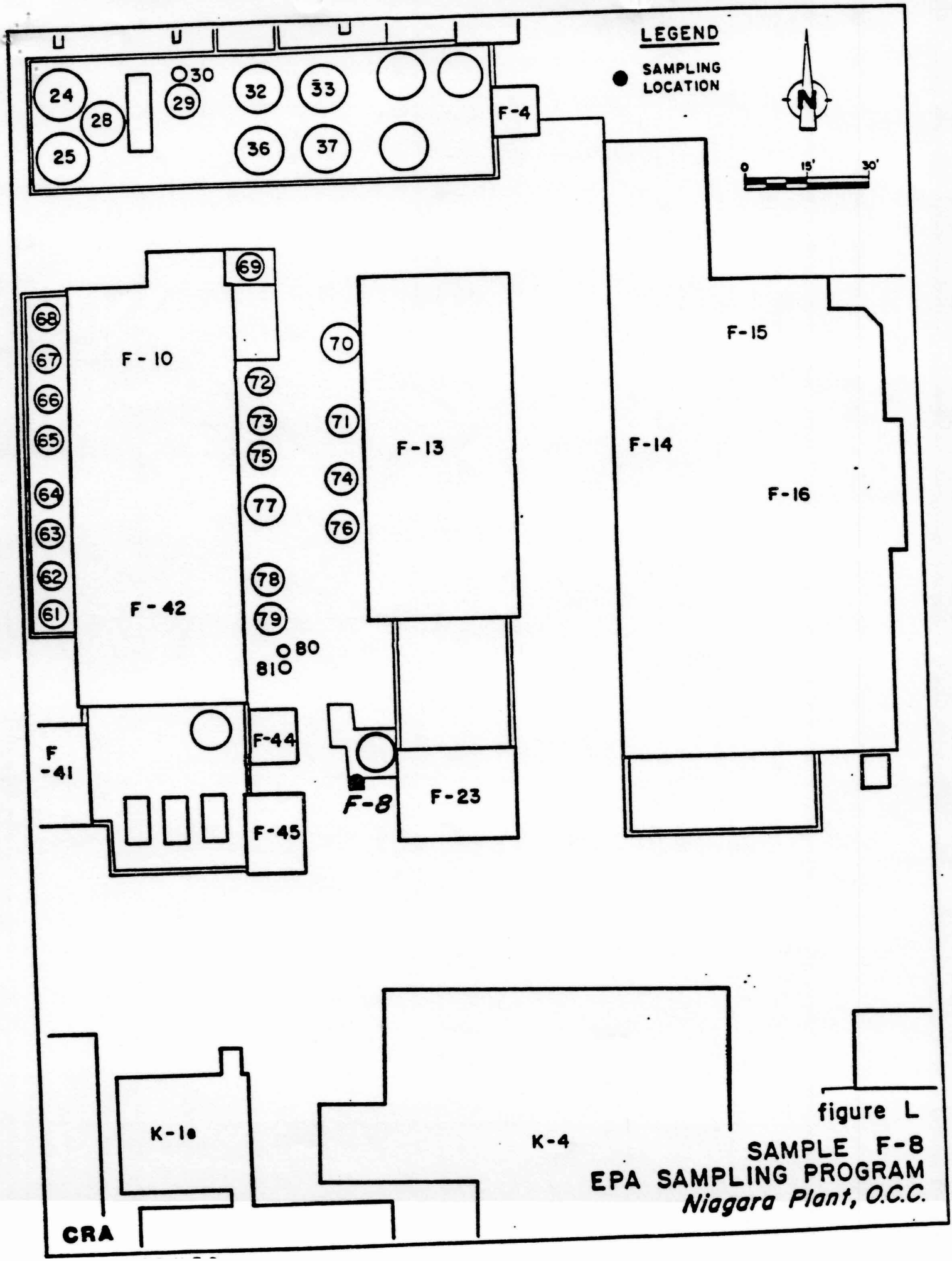
Niagara Plant, O.C.C.



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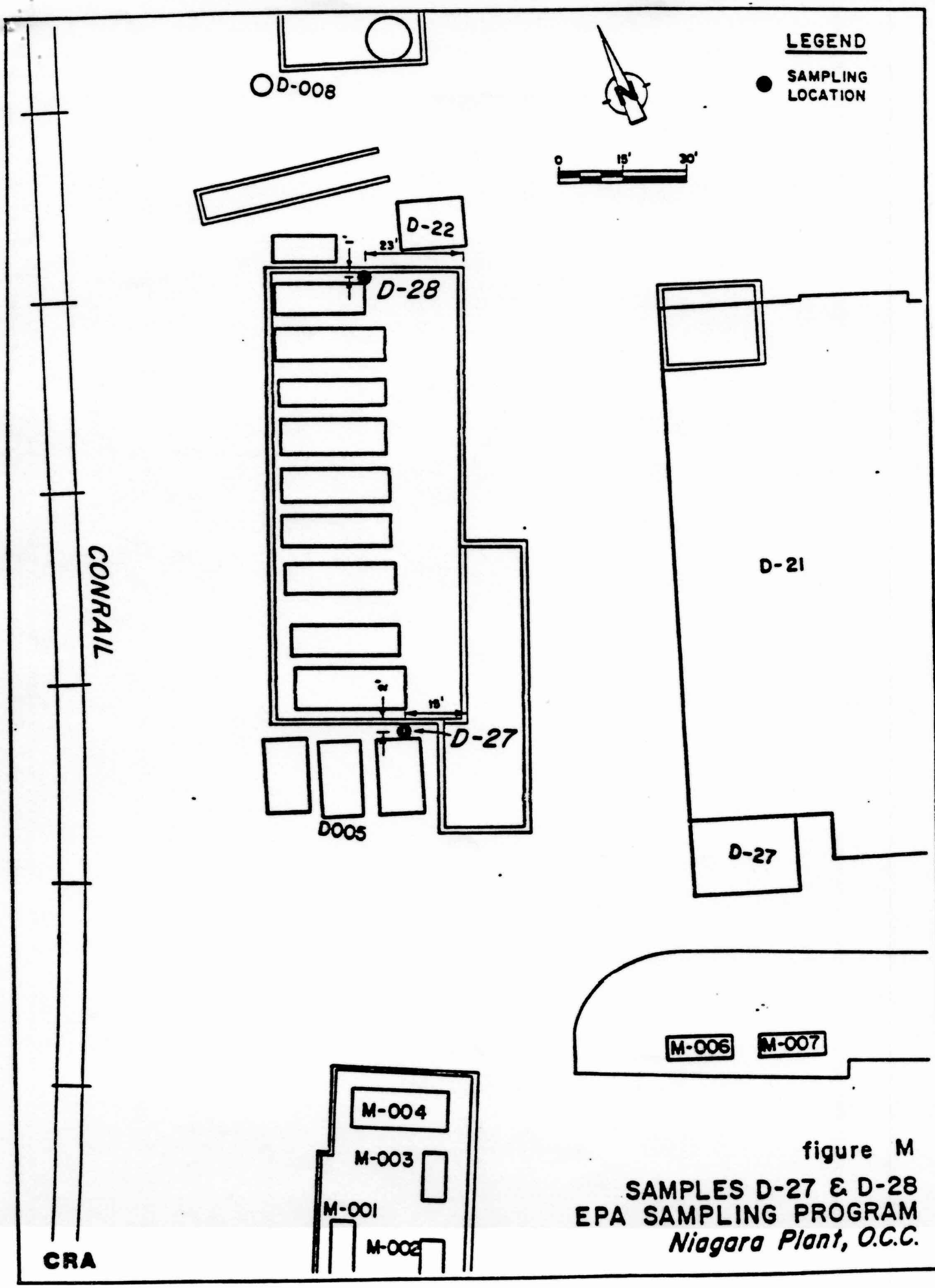
SAMPLE F-8
EPA SAMPLING PROGRAM
Niagara Plant, O.C.C.



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SAMPLES D-27 & D-28
EPA SAMPLING PROGRAM
Niagara Plant, O.C.C.

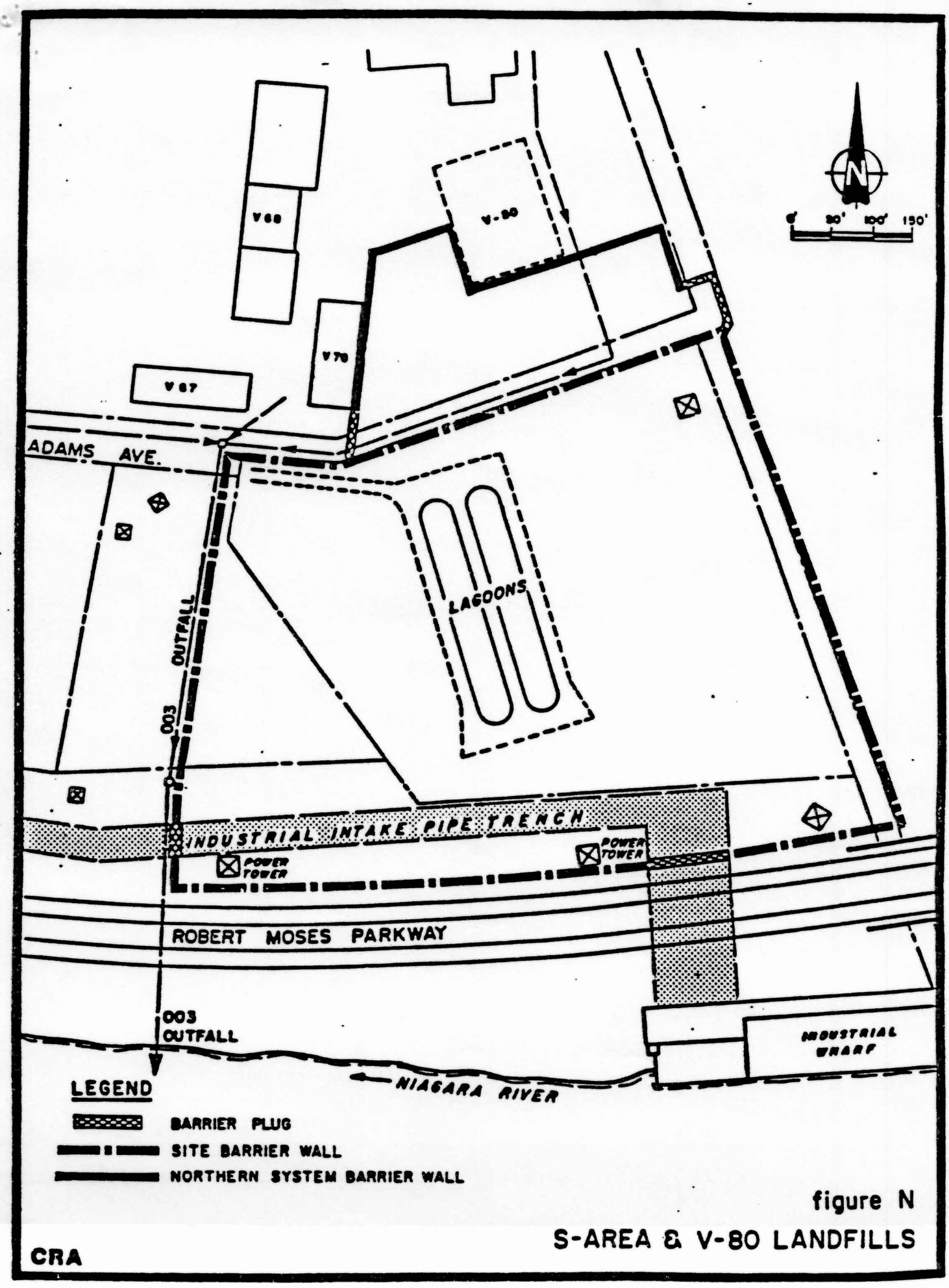

figure N

S-AREA & V-80 LANDFILLS

CRA

SOURCE INVESTIGATION PROGRAM
PHASE I

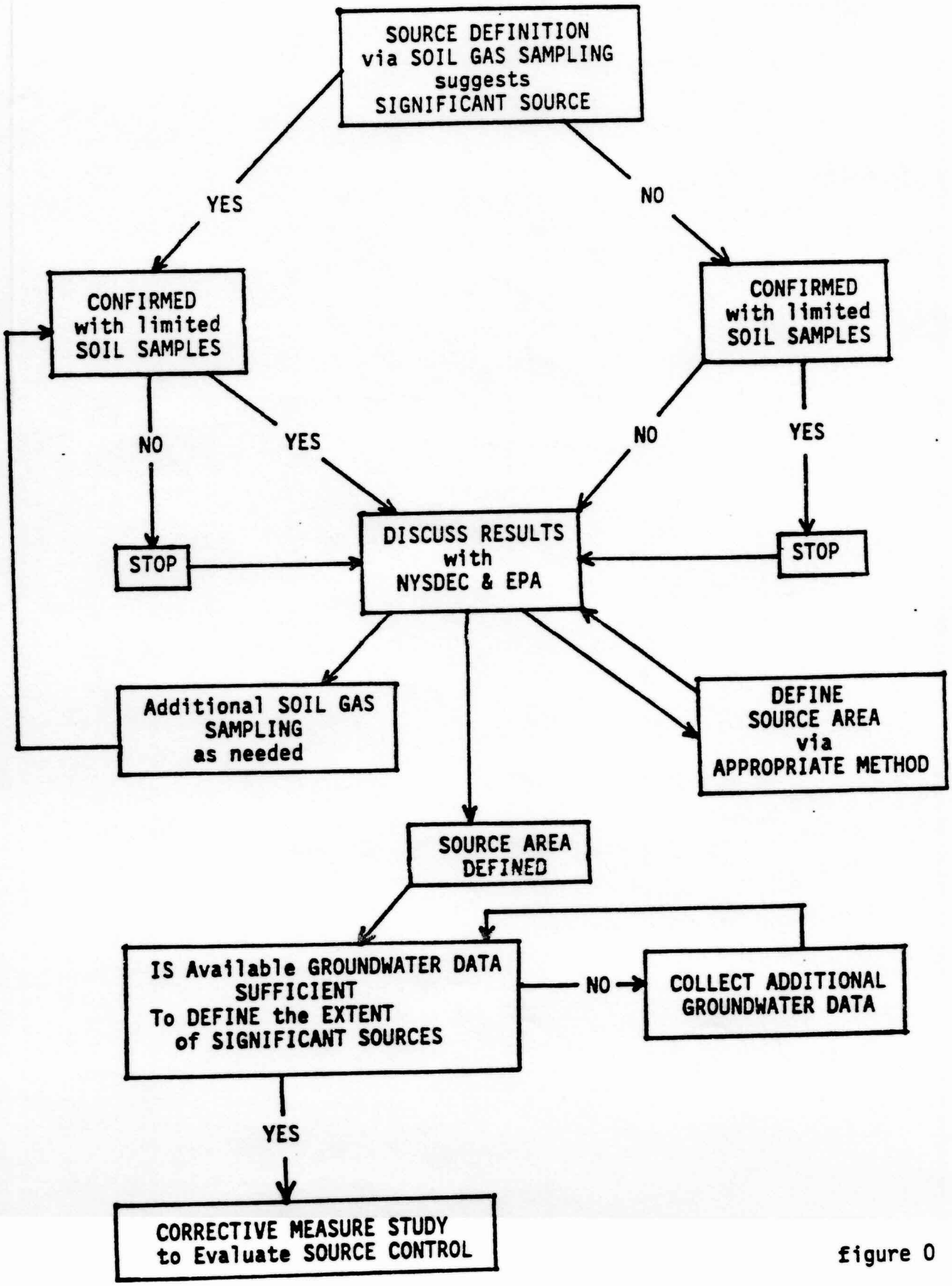

figure 0

MODULE IV - WASTE MINIMIZATION

A. Pursuant to 40 C.F.R. Section 264.73(b)(9), and Section 3005(h) of RCRA, 42 U.S.C. 6925(h), the Permittee must submit to the Regional Administrator, at least annually, a waste minimization certification by the owner or operator. This certification and all accompanying documentation will be submitted on each anniversary date of the effective date of this permit.

B. The Permittee must certify that:

1. A program is in place to reduce the volume and toxicity of hazardous waste generated to the degree determined by the permittee to be economically practicable; and

2. The proposed method of treatment, storage or disposal is that practicable method currently available to the permittee which minimizes the present and future threat to human health and the environment.

C. The Permittee shall submit a Waste Reduction Impact Statement within 150 days of permit issuance. The Permittee shall include the following information in the Waste Reduction Impact Statement:

1. An identification of the annual amount and types of hazardous waste that are generated.

2. For each waste stream, an identification of the source of generation of these hazardous wastes.

3. An analysis of technically and economically feasible hazardous waste reduction techniques, including a description of any techniques that were implemented since 1984, at a minimum.

4. A program and schedule for implementing the feasible hazardous waste reduction techniques.

MODULE V - LAND DISPOSAL RESTRICTIONS

A. BACKGROUND. HSWA prohibits the continued land disposal of untreated hazardous wastes beyond specified dates, "unless the Administrator determines that the prohibition...is not required in order to protect human health and the environment for as long as the wastes remain hazardous...." (RCRA Sections 3004(d)(1), (e)(1), (g)(5), 42 U.S.C. 6924(d)(1), (e)(1), (g)(5)).

Pursuant to 40 C.F.R. Section 264.13(a)(1), before an owner or operator treats, stores, or disposes of any hazardous waste, he must obtain a detailed chemical and physical analysis of a representative sample of the waste. At a minimum, this analysis must contain all the information which must be known to treat, store, or dispose of the waste in accordance with the requirements of 40 C.F.R. Parts 264 and 268 or with the conditions of a permit issued under 40 C.F.R. Parts 270 and 124.

The Permittee shall comply with the waste analysis, notification, certification, and recordkeeping requirements of 40 C.F.R. Section 268.7 whenever generating, treating, or managing a restricted waste.

B. STORAGE OF RESTRICTED WASTES. An owner/operator of a treatment, storage or disposal facility may store such wastes for up to one year unless the Agency can demonstrate that such storage was not solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

A owner/operator of a treatment, storage or disposal facility may store such wastes beyond one year; however, the owner/operator bears the burden of proving that such storage was solely for the purpose of accumulation of such quantities of hazardous waste as are necessary to facilitate proper recovery, treatment, or disposal.

C. LAND DISPOSAL OF RESTRICTED WASTES. The land disposal of restricted waste is prohibited unless the applicable treatment standard is met, the waste is exempt under 40 C.F.R. Section 268.1(c), any other exemption in 40 CFR Part 268, any variance extension, or other relief that is granted.

D. RESTRICTION DATES. The above restrictions become effective and are phased in for specific hazardous wastes over a period which began November 8, 1986.

The restriction dates for the hazardous wastes regulated under this permit are as follows:

Hazardous Waste Code or Resignation	Restriction Date
F001 F002 F003 F005	November 8, 1986
a. Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing the following metals or compounds of these metals with concentrations greater than or equal to those specified below: 1. Arsenic and/or compounds (as As) - 500 mg/l. 2. Mercury and/or compounds (as Hg) - 20 mg/l.	July 8, 1987
b. Liquid hazardous wastes, including free liquids associated with any solid or sludge, containing free cyanides at concentrations greater than or equal to 1000 mg/l.	"
c. Liquid hazardous wastes containing polychlorinated biphenyls at concentrations greater than or equal to 50 ppm.	"
d. Liquid hazardous wastes having a pH less than or equal to two (2.0).	"
e. Liquid hazardous wastes containing halogenated organic compounds in total concentrations greater than or equal to 1000 mgl kg.	"

Hazardous Waste Code or Designation			Restriction Date
K071	U019	U133	August 8, 1988
K073	U031	U151	
K106	U037	U154	
P011	U041	U159	
P012	U044	U188	
P050	U061	U209	
P122	U077	U210	
	U078	U211	
	U129	U220	
	U130	U226	
		U228	
		U249	
F020			November 8, 1988
F027			
P098	U070	U208	June 8, 1989
P106	U080	U289	
	U127		
U002	U128		
U003	U131		
U023	U189		
P006	U076		May 8, 1990
P022	U079		
P028	U081		
	U082		
U017	U183		
U045	U207		
U071			
U072			

MODULE VI - STORAGE OF DIOXIN WASTES IN CONTAINERS

A. Authorized Storage Areas, Waste Types and Storage Volumes:

Pursuant to Section 3001 of the Resource Conservation and Recovery Act, as amended by the Hazardous and Solid Waste Amendments, and 40 CFR Section 264, Subpart I, the Permittee may store certain dioxin wastes in containers at the facility subject to the terms of this permit.

The waste types and authorized container storage areas are:

EPA Hazardous Waste Code	Container Storage Area
F020	U-88 V-60 U-67-2-N U-67-2-S U-67-3 T-27 T-Area
F027	V-60 V-61 U-42/47 U-67-2-N U-67-2-S U-67-3 T-27

Permitted container volume, container types, and maximum numbers of containers are specified in Attachment I of this permit.

B. Containment The Permittee shall provide and maintain a containment system for each permitted storage area in accordance with the requirements of 40 CFR Section 264.175.

C. Condition of Containers. If a container holding the hazardous wastes specified in Section (A) above is not in good condition (e.g., severe rusting, apparent structural defects, deterioration of liner) or if it begins to leak, the Permittee shall transfer the hazardous waste from such container to a container that is in good condition or otherwise manage the waste in compliance with the conditions of this permit. Each such occurrence shall be recorded in the inspection log and maintained as part of the operating record in accordance with 40 CFR Section 264.73. If any leaking container threatens human health or the environment, it must be reported as specified in Module I, Condition E.(15) (i.e., 24-hour reporting).

D. Compatibility of Waste with Containers. The Permittee shall assure that the ability of the container to contain or store the waste is not impaired as required by 40 CFR Section 264.172 and in accordance with Attachment I.

E. Management of Containers. The Permittee shall manage containers as required by 40 CFR Section 264.173 and Attachment II.

F. Special Requirements for Ignitable or Reactive Waste. The Permittee shall not locate containers holding ignitable or reactive waste within 15 meters (50 feet) of the facility's property line.

G. Special Requirements for Incompatible Waste.

(1) The Permittee shall not place incompatible wastes or incompatible wastes and materials in the same container.

(2) The Permittee shall not place hazardous waste in an unwashed container that previously held an incompatible waste or material.

(3) The Permittee shall separate containers of incompatible wastes as indicated in the attached plans, Attachment II, and as required by 40 CFR Section 264.177.

H. Inspections. In accordance with 40 CFR Sections 264.15(c), 264.171 and 264.174, the Permittee shall inspect areas where containers are stored, looking for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors. The Permittee must remedy any deterioration or malfunction of containers, equipment, or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately. Inspection procedures and frequencies shall be carried out in accordance with Attachment III.

I. Other Requirements: Requirements for the storage of the wastes specified in Section (A) above are also contained in Module IV of the New York State Department of Environmental Conservation 6 NYCRR Part 373 permit issued pursuant to the New York State Environmental Conservation Law, Article 27, Title 9.

J. Construction. The T-Area container storage pad will be constructed in accordance with the design drawing (Dwg. A-11-20677, Rev. 2, May 1989) and specifications in Attachments IV and I. The containment area will meet the requirements of 40 CFR 264.175. The Permittee may not commence storage of hazardous waste in this area until The Permittee has submitted to the Administrator by certified mail or hand delivery a letter signed by the Permittee and an independent registered professional engineer stating that the facility has been constructed or modified in compliance with this permit and the Administrator has inspected the newly contructed facility and finds it is in compliance with the conditions of the permit or the Administrator has either waived the inspection or has not, within 15 days, notified the Permittee of his or her intent to inspect.

MODULE VII - STORAGE/TREATMENT IN TANKS

A. (1) Authorized Tanks and Wastes. The Permittee is authorized to use the following tanks to store and treat the following hazardous wastes in tanks subject to the terms of this permit:

Tank No. & Location	Minimum Shell Thickness Shell/Heads (in.)	Nominal Capacity (Gallons)	OCC Waste Nos.	EPA Waste Nos.*
4 U87	0.17/0.30	10,000	RB-12	D001
			RB-05	-
			RB-38	D001, D003
			RB-31	D001, D002
			RB-40	D001, F020 B003
			RB-41	U210, B003 U228, U208
			RB-44	U207
			RB-45	U207, F020
			RB-46	D001
			RB-47	U048, F020
			RB-48	U210, U228 U208, U209
4 U87	0.17/0.30	10,000	RB-01	D001, D002
			RB-39	U210, U130 B003, U128
			RB-40	D001, F020 B003
			RB-41	U210, B003 U228, U208
			RB-44	U207
			RB-45	U207, F020
			RB-46	D001
			RB-47	U048, F020
			RB-48	U210, U228 U208, U209
			RB-49	F020
			Fuel Oil	-
6 U87	0.17/0.30	10,000	RB-05	-
			RB-12	D001
			RB-39	U210, U130 B003, U128
			RB-40	D001, F020 B003
			RB-41	U210, B003 U228, U208
			RB-42	D001
			RB-44	U207

			RB-45	U207, F020
			RB-46	D001
			RB-47	U048, F020
			RB-48	U210, U228
				U208, U209
			RB-49	F020
20	0.17/0.30	20,000	RB-01	D001, D002
U87			RB-39	U210, U130
				B003, U128
			RB-40	D001, F020
				B003
			RB-41	U210, B003
				U228, U208
			RB-44	U207
			RB-45	U207, F020
			RB-46	D001
			RB-47	U048, F020
			RB-48	U210, U228
				U208, U209
			RB-49	F020

* Codes are representative. Additional codes may apply

(2) The Permittee is prohibited from adding additional hazardous waste tanks or from storing or treating hazardous wastes that are not identified in Permit Condition VII.A(1) without permit modifications.

B. (1) DESIGN AND INSTALLATION OF NEW TANK SYSTEMS OR COMPONENTS.

(a) The Permittee shall design and install the new tank system T-20 in accordance with 40 CFR 264.192 and the attached plans and specifications, Attachments IV and V.

The Permittee may not commence storage or treatment of hazardous waste in T-20 until the Permittee has submitted to the Administrator by certified mail or hand delivery a letter signed by the Permittee and an independent registered professional engineer stating that the tank system has been constructed in compliance with this permit and the Administrator has inspected the newly contructed facility and finds it is in compliance with the conditions of the permit or the Administrator has either waived the inspection or has not, within 15 days, notified the Permittee of his or her intent to inspect.

(b) For new, modified or replacement hazardous waste tank systems or components (such as the secondary containment system) not authorized by VII.A.(1) which the Permittee proposes to construct in the future, the Permittee must, prior to construction, submit to the Administrator an application to modify this permit including design plans,

specifications and a written assessment of the tank systems' structural integrity as required by 40 CFR 264.192 and obtain a permit modification.

(c) For tank systems used to store or treat materials that are defined as hazardous waste in the future, the Permittee must obtain a written assessment of the existing tank system integrity within 12 months from the date the waste is defined as hazardous (40 CFR 264.191(c)). The assessment shall be certified by an independent, qualified, professional engineer (40 CFR 264.191).

(2) Secondary Containment and Leak Detection.

(a) Tanks With Secondary Containment System: The Permittee shall construct and maintain the secondary containment and leak detection systems in accordance with the requirements of 40 CFR 264.193 and as specified in the attached plans and specifications, Attachments IV and V.

(b) Tanks Without Secondary Containment System: For tank systems that store or treat materials that are defined as hazardous waste in the future, the Permittee shall design and construct the secondary containment system within the time specified in 40 CFR 264.193(a)(5).

(3) Responses to Leaks or Spills and Disposition of Leaking or Unfit-for-Use Tank Systems. The Permittee must immediately remove from service any tank system or secondary containment system from which there has been a leak or spill or which is found to be leaking or unfit for use as a result of the leak test or assessment, and must satisfy the requirements of 40 CFR 264.196 including the 24-hour notification and 30-day report to the Administrator, containment of releases, repair of the system, and certification of major repairs by an independent, qualified, professional engineer. Examples of major repairs are: installation of an internal liner, repair of a ruptured tank or repair or replacement of a secondary containment vault.

C. GENERAL OPERATING REQUIREMENTS.

(1) The Permittee shall operate the tank systems authorized in Condition VII.A(1) in accordance with 40 CFR 264.194 and as specified in Attachment V.

(2) The Permittee shall not place hazardous wastes or treatment reagents in the tank system if they could cause the tank, its ancillary equipment, or a containment system to rupture, leak, corrode or otherwise fail. [40 CFR 264.194(a)].

(3) The Permittee shall prevent spills and overflows from the tank or containment systems, as required by 40 CFR

264.194(b), and by the methods specified in Attachment V.

D. SPECIAL REQUIREMENTS FOR IGNITABLE OR REACTIVE WASTES

(1) The Permittee shall not place ignitable or reactive waste in a tank unless the procedures described in Attachment V and 40 CFR 264.198(a) are followed.

(2) The Permittee shall document compliance with Module VII, Condition D.(1) as required by 40 CFR 264.17(c) and place this documentation in the operating record.

(3) The Permittee shall maintain buffer zones around tanks as specified in Attachment V and as required by 40 CFR 264.198(b).

E. SPECIAL REQUIREMENTS FOR INCOMPATIBLE WASTES.

(1) In accordance with 40 CFR 264.17(b), the Permittee shall not place incompatible wastes in the same tank or place hazardous waste in a tank that previously held an incompatible waste or material.

(2) The Permittee shall document compliance with Module VII, Condition E.(1) as required by 40 CFR 264.17(c) and place this documentation in the operating record.

F. INSPECTION SCHEDULES. The Permittee shall perform inspections of the tank systems including the secondary containment systems, and leak detection systems used to manage hazardous waste as described in 40 CFR 264.195 and as specified in Attachment III. Documentation of all inspections must be placed in the operating record of the facility.

G. NOT APPLICABLE.

H. NOT APPLICABLE.

I. CLOSURE AND POST CLOSURE CARE.

(1) At closure of the tank system, the Permittee shall close all tank systems specified in Condition VII.A(1) in accordance with 40 CFR 264.197 and the Closure Plan, Attachment X.

(2) If the Permittee demonstrates that not all contaminated soils can be practically removed or decontaminated in accordance with the Closure Plan, then the Permittee shall close the tank system and perform post-closure care in accordance with 40 CFR 264.197(b).

MODULE VIII - MANAGEMENT OF DIOXIN WASTES IN WASTE PILES

A. Authorized Management Areas, Waste Types, and Volumes:

Pursuant to Subtitle C of the Resource Conservation and Recovery Act, as amended by the Hazardous and Solid Waste Amendments, and 40 CFR Section 264, Subpart L, the Permittee may manage certain dioxin wastes in two waste piles (T-28 and T-29) at the facility subject to the terms of this permit. Permitted waste pile volumes, waste types, and management requirements are specified in Attachment XIII of this permit.

(1) Supplemental Approval Procedure (SAP):

Before a waste may be accepted for storage in a waste pile, the following information must be submitted in writing to and accepted by the Agency:

a. The specific location(s) from which the soil/sediment to be stored will be generated.

b. The proposed technique(s) for treating the waste so that:

(i) the waste will not contain or generate free liquids while in the waste pile;

(ii) the waste will have sufficient shear strength to maintain the stability of the waste pile as specified in Attachment VIII of this permit; and

(iii) biological activity which may result in gas generation from the waste while it is in the pile will be minimized.

B. Design and Operating Requirements: The waste piles and structures must be maintained and operated in accordance with Attachments IV and XIII of this permit and 40 CFR Section 264.250(c) and as follows:

(1) The waste piles must be inside a structure that provides protection from precipitation so that neither run-off nor leachate is generated;

(2) Liquids or materials containing free liquids must not be placed in a pile;

(3) The piles must be designed and operated to control dispersal of the waste by wind;

(4) The piles must not generate leachate through decomposition or other reactions; and

(5) The pile is protected from surface water run-on.

C. Containment: The Permittee shall provide and maintain a containment system for each permitted waste pile in accordance with the

requirements of Attachments IV and XIII of this permit. The containment system must be free of cracks, gaps, tears, or punctures and be sufficiently impervious to wastes or liquids to prevent migration through the system.

D. Condition and Management of Bags. All waste to be placed in the waste piles must be contained in bags. If a bag holding the hazardous wastes specified in Section (A) above is not in good condition (e.g., torn, punctured, apparent structural defects, deterioration of liner) or if it begins to leak, the Permittee shall transfer the hazardous waste from such bag to one that is in good condition or otherwise manage the waste in compliance with the conditions of this permit. Each such occurrence shall be recorded in the inspection log and maintained as part of the operating record in accordance with 40 CFR Section 264.73. If any leaking bag threatens human health or the environment, it must be reported as specified in Module I, Condition E.(15) (i.e., 24-hour reporting). Bags must be managed in accordance with Attachments II and XIII of this permit.

E. Compatibility of Waste with Bags. The Permittee shall assure that the ability of the container to contain or store the waste is not impaired to the extent practicable and shall comply with Attachments II and XIII of this permit.

F. Special Requirements for Ignitable or Reactive Waste. No ignitable or reactive waste shall be stored in waste piles.

G. Special Requirements for Incompatible Waste.

(1) The Permittee shall not place incompatible wastes or incompatible wastes and materials in the same waste pile.

(2) The Permittee shall not place hazardous waste in an unwashed bag that previously held an incompatible waste or material.

H. Inspections. In accordance with 40 CFR Section 264.254(b), the Permittee shall inspect waste piles weekly, looking for leaking bags and for deterioration of bags, the containment system, the presence of liquids in the containment system sumps, and improper operation of run-on and run-off control systems. The Permittee must remedy any deterioration or malfunction of bags, equipment, or structures which the inspection reveals on a schedule which ensures that the problem does not lead to an environmental or human health hazard. Where a hazard is imminent or has already occurred, remedial action must be taken immediately. Inspection procedures and frequencies shall be carried out in accordance with Attachments III and XIV of this permit.

I. Other Requirements: Requirements for the management of the wastes specified in Section (A) above are also contained in Module VII of the New York State Department of Environmental Conservation 6 NYCRR Part 373 permit modification issued pursuant to the New York State Environmental Conservation Law, Article 27, Title 9.

MODULE IX
REMEDIAL WASTE INCINERATION

A. Design and Modifications. The Permittee shall maintain the facility in accordance with the attached design plans and specifications, Attachments IV and XV, or equivalent.

1. Modifications will be made to the incinerator system in accordance with Attachments IV and XV according to the schedule specified in Attachment XI. A new waste unloading area and tank storage system will be constructed in accordance with Module VII of this permit.

2. In accordance with the conditions and schedule in Attachment XI, the Permittee shall; (a) complete a feasibility study for the purpose of evaluating and selecting air pollution control equipment (APCE) capable of attaining 99 percent or greater removal efficiencies for metals or as best available control technology (BACT) and also capable of controlling HCl emissions to BACT not to exceed 0.71 g/sec; (b) install the selected APCE with a minimum stack height of 100 feet; (c) conduct an operational shakedown of the system under conditions approved in writing by the Agency; (d) conduct particulate and HCl tests; and (e) perform a comprehensive trial burn under conditions approved in writing by the Agency to demonstrate the performance capabilities of the upgraded incinerator system. The Agency may extend the duration of the 720 hour shakedown period for up to 720 additional hours at the request of the Permittee when good cause is shown.

Within one week of the completion of the particulate and HCl tests, the Permittee shall submit to the Agency the results of those tests. If the test results indicate that the particulate and HCl emission levels are less than or equal to the levels demonstrated by the existing system and upon written approval by the Agency, wastes may be incinerated in accordance with the limitations of Condition (IX.C) below with remedial waste feed rates limited by Condition (IX.C.9.a) and other applicable limitations. Prior to receiving this written approval, no remedial wastes may be incinerated using the upgraded APCE, except during the tests, if needed. The incinerator will be operated and monitored in accordance with Condition (IX.D) below as modified in writing by the Agency to reflect the characteristics of the APCE selected and installed (both during the shakedown period and after).

After the evaluation and approval of the comprehensive trial burn report, the Agency will modify (if necessary) the maximum constituent feed rates (MCFRs) given in Condition (IX.C.9.b) and authorize in writing, the incineration of remedial wastes at feed rates to be limited by these MCFRs and other applicable waste feed limitations (e.g., ash feed rate, chlorine/fluorine feed rate, etc.).

See Attachment XI of this Permit (Compliance Schedules) for additional requirements and milestone dates.

3. No modification to the incinerator and its APCE shall be made which would affect the achievement of the performance standards in Condition IX.B., or any other permit conditions specified in this permit, without first obtaining written approval from the Agency.

B. Performance Standard. The Permittee shall maintain the incinerator so that, when operated in accordance with the operating requirements specified in this permit, it will meet the following performance standards:

1. The incinerator must achieve a destruction removal efficiency (DRE) of 99.99% for each organic hazardous constituent listed in 40 CFR Part 261 Appendix VIII in each waste feed with the exceptions of polychlorodibenzo-p-dioxins (PCDD), polychlorodibenzofurans (PCDF), and polychlorinated biphenyls (PCB). For PCDD, PCDF, and PCB, the incinerator must achieve a DRE of 99.9999%. DRE shall be determined using the method specified in 40 CFR 264.343(a)(1).

2. The Permittee must control hydrogen chloride (HCl) emissions, such that the rate of emissions is no greater than the larger of either 1.8 kg/hr or 1% of the HCl in the stack gas prior to entering any pollution control equipment.

3. The incinerator must not emit particulate matter in excess of 0.08 gr/dscf when corrected to seven (7) percent oxygen in the stack gas in accordance with the formula specified in 40 CFR 264.343(c).

4. The combustion efficiency of the incinerator shall be at least 99.9 percent computed as follows:

Combustion efficiency = $[CO_2/(CO_2 + CO)] \times 100$; where
CO_2 = Concentration of carbon dioxide
CO = Concentration of carbon monoxide.

5. Compliance with the operating conditions specified in this permit will be regarded as compliance with the above performance standards. However, evidence that compliance with such permit conditions is insufficient to ensure compliance with the above performance standards may be "information" justifying modification, revocation, or reissuance of the permit pursuant to 40 CFR 270.41.

C. Limitation on Wastes: The Permittee shall incinerate only the following wastes and only as allowed by the terms of this permit and the NYSDEC 6 NYCRR Part 373 permit:

1. The Permittee shall incinerate only the wastes listed in Attachment XVI and similar wastes for which prior written approval has been obtained from the Agency in accordance with the procedures and limitations in Attachment XVI.

2. The Permittee shall not incinerate any waste containing greater than 100 ppm of any organic hazardous constituent having a heat of combustion less than 0.24 kcal/gram, nor any material more difficult to burn than the Class 1 constituents listed in the USEPA Principal Hazardous Organic Constituent Thermal Stability Index (Table D-1), USEPA Guidance on Setting Permit Conditions and Reporting Trial Burn Results (January 1989).

3. The Permittee may accept and incinerate in accordance with Attachment XVI the following wastes:

   a. The following OCC liquid remedial wastes generated as the result of remedial (including investigative) activities, including non-aqueous phase liquids (NAPL):

      (1) Wastes generated at, or presently located on or adjacent to, OCC facilities located in Niagara Falls and North Tonawanda, New York.

      (2) Wastes presently located on or adjacent to the OCC production facility in Tacoma, Washington.

      (3) Wastes identified pursuant to the PCB trial burns described in the PCB Trial Burn Report located on or adjacent to the OCC production facility in Taft, Louisiana.

      (4) The segregatable portion of wastes from multi-generator disposal sites which were generated at the OCC facilities identified in (1) through (3) above.

(5) All wastes identified in (1) through (3) above generated as a result of integrated remedial activities undertaken at multi-generator disposal sites which are presently the subject of litigation before the U.S. District Court for the Western District of New York between EPA and/or New York State and OCC.

These wastes may include PCBs in excess of 50 ppm, PCDD, PCDF and Mirex. If any OCC process waste is ever found to contain these constituents, that process waste shall be managed as remedial waste and be governed by all conditions in this permit. The co-firing of, and/or the incineration of blends of, remedial waste with process waste and/or the fuel oil shall be governed by all conditions in this permit. The western New York sites generating the above remedial wastes include the Hyde Park landfill; the "S-Area" landfill and other sources at the OCC Buffalo Ave., Niagara Falls plant; the 102nd St. Landfill; the OCC Durez plant; and Love Canal.

The following conditions pertain to the incineration of remedial wastes and blends of remedial wastes.

4. The viscosity of the wastes as fed to the incinerator shall not exceed 100 centistokes.

5. The chlorine content of the wastes shall not exceed 54 percent.

6. The total fluorine feed rate shall not exceed 295 lb/hr.

7. The total ash feedrate (from all sources, e.g., waste and auxiliary fuel) to the incinerator shall not exceed 0.031 lb/min (waste ash content not to exceed 0.5%).

8. The physical form of the waste shall be a pumpable liquid.

9. The feed rate of remedial wastes shall be limited to ensure that none of the selected constituents will be incinerated at rates exceeding the given maximum constituent feed rate (MCFR). Additionally, the sum of the ratios of each constituent's feed rate to its MCFR shall not exceed 1.25. Additional selected constituents and MCFRs may be established in accordance with Attachment VIII of this permit (Waste Analysis Plan). Actual feed rates may be limited by other conditions in this permit (e.g., ash feed rate, chlorine content, fluorine feed rate).

a. Until the incinerator air pollution control equipment (APCE) has been upgraded and trial burns have been performed in accordance with Condition (IX.A.2) above and the results are approved in writing by the Agency, the MCFRs under "Existing APCE" apply. In addition, the feed rate of Hyde Park NAPL (RB-40) shall not exceed 5 lb./min unless it is demonstrated that the MCFRs, total ash feed rate and other permit limits would be complied with at a higher feed rate and this is approved in writing by the Agency.

b. After the APCE has been upgraded and trial burns have been performed in accordance with Condition (IX.A.2) above and the results are approved in writing by the Agency, the MCFRs under "New APCE" apply, contingent upon the demonstration by OCC that all applicable trial burn requirements were met and that the new APCE achieved at least 97% control of metals. Based upon the results of the trial burn, the MCFRs for the metals will be adjusted in writing by the Agency so that the emissions do not exceed the levels that would occur with 97% control (except that if greater than 97% control is achieved, the adjustment will be based upon 99% control).

Selected Constituent	MCFR (lb/min)	
	Existing APCE	New APCE
Hexachlorocyclohexane(BHC)	0.39	SAME
Hexachlorocyclohexane(BHC)	3.3	"
PCBs	18	"
Benzene	150	"
Hexachlorobenzene	2.6	"
Hexachlorobutadiene	56	"
Carbon tetrachloride	33	"
2,4,6-Trichlorophenol	218	"
Mirex	2.4	"
2,3,7,8-TCDD Equiv.	7.5×10^{-4}	"
Arsenic	8.9×10^{-5}	3.6×10^{-4}
Beryllium	3.9×10^{-4}	1.6×10^{-3}
Cadmium	7.3×10^{-4}	3.0×10^{-3}
Chromium	1.0×10^{-4}	4.2×10^{-4}
Nickel	8.7×10^{-3}	3.5×10^{-2}

D. Operating Conditions and Monitoring Requirements. The Permittee shall feed the wastes described in Condition IX.C only to incinerator Unit No. 2 under the following conditions:

1. The Permittee shall operate, monitor, test, inspect, and calibrate the incinerator system in accordance with the

requirements of 40 CFR 264.344, 345, and 347, Attachments III, and XV, and the table below. For each interlocked parameter in the table below (i.e., those marked with an "*"), any deviation from the specified "Operating Limit" for a period longer than the indicated "Time" limit must result in an automatic cutoff of the waste feed to the incinerator.

Twice per month, the automatic waste feed cutoff system must be tested to ensure that for each interlocked parameter, except those marked with an "@", deviations from allowed operating limits will result in an automatic waste feed cutoff. Alarms must also be tested twice per month. For interlocked parameters in the table below marked with an "@", the operation of the automatic waste feed cutoff system must be tested at least twice per year.

Parameter & Instru. No.	Location (A)	Operating Limits	Monit. Freq.	Calib. Freq.
Total Waste & Aux. Fuel Feed Rates (B) W201-205	Waste/Fuel Feed Lines DWG.A-55119 Sheets 4,5, 6 of 11	(Maximum) Unit #2: 31 lb/min Time: 1 minute	Cont.	Mo.
Combustion Air Flow Rate F-210	Comb. Air Inlets DWG.A-55119 Sheet 3 of 11	(Maximum) Unit #2: 2900 scfm* Time: 3 minutes	Cont.	Mo.
Compressed Air Pressure P-303	Air Receiver Outlet DWG.A-55119 Sheet 2 of 11	(Minimum) 70 psig* Time: Instantaneous	Cont.	Ann.
Steam Flowrate F-201	Steam Feed Lines Sheet 1 of 11	(Maximum) Unit #2: 1960 lb/hr* Time: 1 minute	Cont.	Mo.
Reactor Body Pressure P-206	Reactor Chambers DWG.B-56698	(Maximum) -0.1 inch H_2O, gauge* Time: 1 minute	Cont.	Mo.
Incin. Temp (Body & Exit Temps.) T-204 T-203	Reactor Chambers DWG.B-56698 DWG.B-56699	(Minimum exit temp.) Unit #2: 1200°C* Time: Instantaneous	Cont.	Mo.
CO A-202A	Exit Duct DWG.A-54649	(Maximum) 50 ppm uncorrected* Time: 60 minute rolling average	Cont.	Da.

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Parameter & Instru. No.	Location (A)	Operating Limits	Monit. Freq.	Calib. Freq.
O_2 A-202	Exit Duct DWG.A-54649	Minimum: 7%* Maximum: 14% Time: 3 minutes	Cont.	Da.
Cl_2 A-201	Main Stack DWG.A-54649	(Maximum) 50 ppm uncorrected* Time: 5 minutes	Cont.	Wk.
CO_2 A-202B	Exit Duct DWG.A-54649	N/A	Cont.	Wk.
River Water Pump Press. P-302	River Water Pump Outlet DWG.A-55119 Sheet 2 of 11	Minimum 70 psig*@ Time: Instantaneous	Cont.	Mo.
Quench Water Flowrate F-302	River Water Pump Outlet DWG.A-55119 Sheet 2 of 11	(Minimum) 140 gpm	Every hour	Ann.
Scrubber Water Flow-rate F-301	River Water Pump Outlet DWG.A-55119 Sheet 2 of 11	425 gpm ± 20 gpm	Every hour	Ann.
Scrubber Inlet Gas Temp. T-301	Scrubber Inlet DWG.A-55119 Sheet 9 of 11	(Maximum) 110°C*@	Cont.	Qtr.
Scrubber Pressure Drop N/A	Packed Scrubber DWG.A-55119 Sheet 9 of 11	0.5 - 2.0 in. H_2O	Every 4 ± 1 hours	N/A
Caustic Header Pressure	Caustic Header Feed Line DWG.A-55119 Sheet 9 of 11	(Minimum) 30 psig* Time: 1 minute	Cont.	Mo.
Demister Circulation Pump Press. N/A	Circulation Pump Outlet DWG A-55119 Sheet 9 of 11	50 psig ± 10 psig	Every 4±1 hours	Ann.

Parameter & Instru. No.	Location (A)	Operating Limits	Monit. Freq.	Calib. Freq.
Demister Effluent Caustic Strength N/A	Demister Eff. Prior to Make-up line DWG.A-55119	(Minimum) 50 grams of sodium hydroxide per liter (gpl)	Every 4±1 hours	N/A
Caustic Make-up Flowrate	Caustic Feed Line DWG.A-55119 Sheet 9 of 11	(Waste Specific) ± 20% of flowrate that provides caustic strength>50 gpl* Time:5 minutes	Cont.	Mo.
Demister Water Flowrate Equip. #7	Demister Water Inlet DWG.A-55119 Sheet 9 of 11	N/A	Every 4±1 hours	Ann.
Ex. Fan Inlet Static Pressure P-311	Demister Ex. DWG.A-55119 Sheet 9 of 11	-4.0 to - 8.0 in. H_2O	Every 4±1 hours	Ann.
Ex. Fan Motor Speed N/A	Ex. Fan DWG.A-55119 Sheet 9 of 11	(Maximum) 1200 rpm	Every 4±1 hours	Ann.
Exhaust Gas Flowrate Pitot Tube	Main Stack DWG.A-54649	Maximum 7500 acf/min	Mo.	N/A

Monit. Freq. = Monitoring Frequency : Calib. Freq. = Calibration Frequency
Cont. = Continuous : Mo. = monthly : Ann. = Annually: Wk.=weekly
Da. = Daily : Qtr. = Quarterly : N/A = Not Applicable

(A) List of drawings including drawing revision number and revision date is specified in Attachment I of this Permit.

(B) The sum of all positive feed rates (waste plus auxiliary fuel) indicated by the data logger (including positive feed rates recorded for both residue burners) shall not exceed the operating limits specified in the table.

(C) Actual feed rate may be limited by other conditions in this permit (e.g. ash feed rate, chlorine feed rate, fluorine feed rate, MCFR).

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2. The requirements of this permit (including operating conditions, monitoring requirements, etc.) apply to hazardous waste including exepmt hazardous waste, to solid waste, and to auxilliary fuel other than natural gas and fuel oil.

3. The Permittee may burn only natural gas or fuel oil when the exit temperature is less than that specified in condition IX.D.1. Other materials may not be introduced into the incinerator unless the incinerator is operating within the conditions specified in condition IX.D.

4. The Permittee must not feed waste to the incinerator unless all of the monitoring equipment for the parameters listed in Condition IX.D.1 which are interlocked for automatic waste feed cutoff and associated electronic equipment are operating properly except during daily preventive maintenance and while calibrating continuous emission monitors.

5. The Permittee may only feed remedial wastes to the incinerator from tanks 4, 5, 6 and 20. No waste may be fed to the incinerator directly from railcars, tank trucks, or other containers.

6. No more than two feed nozzles (i.e., waste, auxiliary fuel, or combination) may be used at any one time.

7. Any "off" waste or auxilliary fuel feed pump must cause a consistent reading on the data logger printout that is known to indicate the "off" condition (e.g. - 15.0 lb/min.).

8. Steam feed rates shall be adjusted to minimize chlorine emissions as described in Attachment XV, Section D-11 of this Permit.

9. Only combustion unit (i.e. chamber) No. 2 may be operated while burning remedial waste. Unit No. 1 and its associated duct work must be securely blanked off while burning remedial waste.

10. Water discharged from the packed bed scrubber and the quench tower shall not be recirculated back to the packed bed scrubber or quench tower.

11. The exit gas temperature must not exceed the incinerator body temperature.

E. Recordkeeping:

1. The Permittee shall record and maintain in the operating record described in 40 CFR 264.73 all recordkeeping, monitoring, inspection, testing and calibration data required by this permit and 40 CFR 264.347(d).

2. The applicant shall record all process deviations from allowed operating limits and a summary of operations in a monthly report to be filed by the third week of the following month with the NYSDEC Region 9 Office. At a minimum, the monthly report must address the following items:

   a. Operating Summary

      (1) hours each unit was operated.
      (2) brief explanation of reason(s) for down hours

   b. Monitor Summary

      (1) list of parameters exceeding operating limits of condition IX.D.1.
      (2) parameter operating limit
      (3) monthly exceptions
      (4) parameter interlock limit
      (5) monthly shutdowns
      (6) year-to-date shutdowns

   c. Interlocked Shutdowns

      (1) date, time, and duration of shutdown;
      (2) data logger print-out for all monitored parameters including 2 hours before and 2 hours after shutdown (not required for shutdowns which occur during start-up or when switching wastes);

      (3) cause of shutdown;
      (4) corrective actions taken.

   d. Additional Comments.

   e. Weekly Inspection Summary

      (1) completed residue burner weekly inspection checklist

f. Residue Inventory

(1) list of wastes incinerated
(2) monthly quantity incinerated by waste code specifying source of waste feed for each (i.e. tank #, trailer tank truck, portable tank)

(3) year-to-date quantity incinerated by waste code

g. Exhaust Gas Velocity

(1) exhaust gas velocity and exhaust gas flow rate as determined by pitot tube in accordance with condition IX.D.1.

3. A record shall be maintained in the operating record of the following: name and quantity of each waste incinerated, including the time period overwhich the waste was incinerated and the source of the waste feed (i.e. tank #).

4. A record of any replacement, maintenance or repair of an instrument listed in IX.D.1 and of any major maintenance or repair to the incinerator and its associated equipment shall be maintained in the operating record.

F. General Requirements:

1. Upon request of the Administrator, the Permittee shall perform the tests required by 40 CFR 264.347(a)(3). By January 1, 1992, the Permittee will submit a trial burn plan to the Agency. The Agency will review and approve, comment upon, or deny the trial burn plan within 60 days of receipt. The trial burn plan will be designed so that the performance of the incinerator may be reevaluated before the renewal of this Permit.

The Permittee may conduct the trial burn only after obtaining written authorization from the Agency. Trial burn results including all back-up data must be submitted to the Agency by January 31, 1993. This requirement will be reviewed by the Agency on July 1, 1991 to assess whether this trial burn may be combined with the trial burn required by Attachment XI.

The Permittee may conduct additional trial burns or tests subject to prior written approval by the Agency (and the terms of this Permit.) Trial burns or tests may be conducted to demonstrate incinerator performance while

operating under modified physical operating conditions not authorized by Condition IX.D or while burning OCC wastes not authorized by Condition IX.C above.

2. The Permittee must provide representatives for unannounced inspections of the incineration facility by the Agency.

3. Analysis of the wastes to be incinerated must be performed in accordance with Attachment VIII and 40 CFR 264.341. On June 30 of each year, the Permittee shall submit copies of all analytical results associated with wastes that have been incinerated during the previous 12 months to the Agency. After the June 30, 1991 submittal of this information, the Agency will determine whether the submittal of analytical results may be discontinued for the wastes described in Condition IX.C.3.a(1).

4. Representative samples of Hyde Park NAPL (RB-40) and Taft NAPL (RB-41) must be analyzed and the results submitted to the Agency before the first batches are incinerated for the 17 metals listed in Section 2.2.6 of Attachment VIII of this permit and all organic hazardous constituents reasonably expected to be present in the wastes. These analyses must be repeated by June 30, 1991 and again by June 30, 1992 and the results submitted in writing to the Agency by those dates.

5. The incinerator and associated equipment (pumps, valves, conveyors, pipes, etc.) must be subjected to a thorough visual inspection at least daily for leaks, spills, fugitive emissions and signs of tampering in accordance with 40 CFR 264.347(b) and Attachment III.

6. After any period of non-use of the incinerator exceeding one month the Permittee must, prior to feeding waste to the incinerator, perform the following: thoroughly inspect the unit per Condition IX.F.4, calibrate all instruments listed in Condition IX.D.1 that have a calibration frequency less than quarterly, test the automatic waste feed cutoff system per Condition IX.D.1, and check all monitoring parameters listed in Condition IX.D.1 to ensure that all parameters are within the operating limits of the permit.

7. After any major maintenance or repair to the incinerator, and its associated equipment (including replacement of the stack fan and installation of new or cleaned packing in the packed tower or demister) the permittee must perform the work identified in Condition, IX.F.5 for the instruments,

automatic waste feed cutoff, system parameters, and other monitoring parameters that could reasonably be impacted by the major maintenance or repair.

8. The requirements of this Module supercede any conflicting requirements in Attachment VIII of this permit.

9. The Permittee shall close the incinerator and all associated equipment as required by 40 CFR 264.351 and as described within the applicable portions of Attachment X, Facility Closure Plan.

10. Before incinerating the N-Area remedial waste or any other remedial waste containing greater than 10% fluorine, the Permittee shall:

    a. demonstrate to EPA 99.99% DRE on chlorobenzotrifluorides or approved surrogate for same or to provide alternative documentation that 99.99% will be achieved

    b. determine hydrogen fluoride (HF) removal efficiency and evaluate the impacts of HF emissions using available regulations and guidance

    c. receive NYSDEC's and/or EPA's approval.

    At the latest, all stack tests or trial burns performed to satisfy a. and b. above shall be conducted during the trial burns required by Attachment XI of this Permit or immediately following same.

ATTACHMENT XI: COMPLIANCE SCHEDULES

1. Reporting

No later than 14 calendar days following each interim and final compliance date specified below, the Permittee shall submit to the NYSDEC and EPA a report of its compliance or non-compliance with the applicable interim or final requirement. Progress reports will be submitted in accordance with the dates specified below.

2. Construction of New Incinerator Unloading and Tank Storage Area:

Within 1 1/2 year of the effective date of this modified Permit, the Permittee shall construct the "T-20 Unloading and Storage Area" in accordance with Attachments XV and XVI of this Permit and the following Engineering Drawings (incorporated into Attachment I of this Permit):

Drawing #	Title	Rev. #	Date
A-59067 (1 of 2)	Niagara Complex Residue Incinerator System Storage & Unloading Expansion (Proposed)	0	10/20/88
A-59067 (2 of 2)	Niagara Complex Residue Incinerator System Storage & Unloading Expansion (Proposed)	0	10/20/88
B-59061	20M Residue Storage Tank	0	8/14/88
A-55119 (6A of 11)	Engineering Flow Sheet	0	10/20/88

3. Upgrade of Incinerator Air Pollution Control Equipment (APCE):

The Permittee shall install and test new APCE designed to achieve 99% or greater metals removal efficiency or best available control technology (BACT), and also achieve BACT for HCl not to exceed 0.71 g/sec under worst case conditions in accordance with the following schedule:

a. No later than May 1, 1990, Permittee shall submit to EPA for its written approval a feasibility study (including consideration of alternate technologies) and recommended design for the new APCE described above.

b. Within 30 days after receipt of the "Step a." documents, EPA will review and either approve or request revisions* to the study and design.

c. Within 6 months after receipt of EPA approval per Step b., Permittee shall submit to EPA for its written approval a detailed engineering report, design drawings and specifications, plot plan, and application for a permit to construct the system selected in Steps a/b.

d. Within 30 days after receipt of the "Step c." documents, EPA will review and either approve or request revisions* to the detailed engineering design submitted in Step c.

e. Within 6 months after receipt of EPA approval per Step d., Permittee shall submit to EPA for its written approval the following:

(i) Proposed operating conditions for the new APCE necessary to operate in compliance with the performance standards described above and 40 CFR 264.343, including restrictions on waste constituents, waste feed rates and the operating parameters identified in 40 CFR 264.345.
NOTE: All conditions in Module IX not affected by the new APCE remain in effect.

(ii) A complete particulate and HCl test plan, if separate tests are to be done in addition to that required by (iii).

(iii) A complete comprehensive trial burn plan including all information specified in 40 CFR 270.62 and the most current USEPA and NYSDEC guidance.

(iv) An equipment fabrication and construction progress report.

f. Within 12 months after receipt of EPA approval per Step d., Permittee shall complete construction and start up.

g. Within 720 hours of operating time incinerating hazardous waste after installation of the new APCE, Permittee shall complete the particulate and HCl tests per either Step e. (ii) or (iii).

h. Within one week after the tests in Step g., Permittee shall submit the test results to EPA.

i. Within 1,440 hours of operating time incinerating hazardous waste after installation of the new APCE, Permittee shall commence the comprehensive trial burn described in e.(iii).

j. Within 90 days after completion of the "Step i." trial burn, the Permittee shall submit to EPA a complete trial burn report and certification in accordance with 40 CFR 270.62 including all analytical and instrument data, QA/QC, and all back-up data.

* If the first submission of the documents required by Step a., c., or e. is determined by EPA to need revision, the Permittee shall revise the documents to address all comments and resubmit to EPA within 30 days of receipt of the EPA comments. Go back to Step b. or d. above, as appropriate.

If the second submission of the documents required by Step a., c., or e. is determined by EPA to need revision, EPA and Permittee shall promptly have sufficient meetings, correspondence and/or telephone communications to ensure a document acceptable for EPA is produced by the Permittee within 20 days after receipt of the EPA comments.

4. Submittal of Revised Financial Assurance Mechanism:

At least 60 days before receiving remedial wastes for storage in tanks T-20, T-5 or T-6, the Permittee shall submit an acceptable financial assurance mechanism for closure in accordance with 6 NYCRR 373-2.8 to the Department reflecting the revised closure cost estimate in Attachment X of this Permit.

ATTACHMENTS

The following Attachments (except Attachment XI which is included in this permit) from the New York State Department of Environmental Conservation (NYSDEC) 6 NYCRR Part 373 permit are incorporated by reference into this permit with the indicated correspondence:

USEPA HSWA/RCRA Permit Attachment		NYSDEC 6 NYCRR PART 373 Permit Attachment	
I.	Containerized Waste Storage Locations	D-2.	Containerized Waste Storage Locations
II.	Container Management	D-1.	Container Management
III.	Procedures to Prevent Hazards	B.	Procedures to Prevent Hazards
IV.	Engineering Drawings	I.	Engineering Drawings
V.	Storage in Tanks	E.	Storage in Tanks
VI.	Contingency Plan	G.	Contingency Plan
VII.	Appendix I: SDCP	-	Appendix I: SDCP
VIII.	Waste Analysis Plan and Waste Characterization	A.	Waste Analysis Plan and Waste Characterization
IX.	Personnel Training	C.	Personnel Training
X.	Closure Plan/Financial Requirements	H.	Closure Plan/Financial Requirements
XI.	Compliance Schedules (Included in the HSWA permit, see pages A-1 through A-3)		
XII.	References to Confidential Information	K.	References to Confidential Information
XIII.	Waste Pile Management	E-2.	Waste Pile Management
XIV.	CSF Health and Safety Plan	Appendix II.	CSF Health and Safety Plan
XV.	Incinerator Design and Operation	F-1.	Incinerator Design and Operation
XVI.	Wastes Authorized for Incineration	F-2.	Wastes Authorized for Incineration